
# Facility Response Plan (FRP)

## FRP Prepared For:

Coastal Energy Corporation
234 Burnham Road
Willow Springs, MO 65793

## FRP Prepared By:

Environmental Works, Inc.
1455 E. Chestnut Expy
Springfield, MO 65802
417-890-9500

## FRP Prepared:

June 2014
Project # 140201

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## APPENDICES



## LIST OF FORMS

**FRP Cover Sheet**

## COASTAL ENERGY CORPORATION
## RESPONSE PLAN COVER SHEET

40 CFR part 112.20 (a)(ii) and 112 .21

| | |
|---|---|
| **FACILITY NAME** | **COASTAL ENERGY CORPORATION** |
| **LOCATION** | 232 BURNHAM ROAD |
| **CITY** | WILLOW SPRINGS |
| **COUNTY** | HOWELL |
| **STATE** | MISSOURI |
| **LATITUDE** | $36^0$ 58' 31" N |
| **LONGITUDE** | $91^0$ 57" 7" W |
| **PHONE** | 417 469 2777 |
| **PLANT MANAGER** | Scott Altermatt |
| **SIC CODE** | 1422 |
| **LARGEST TANK IN SERVICE** | 420,000 gallons |
| **MAXIMUM OIL STORAGE CAPACITY** | 2,812,000 gallons |
| **WORST CASE OIL DISCHARGE** | 420,000 single largest asphalt tank<br>30,000 single largest ethanol tank |
| **DISTANCE TO NAVIGABLE WATER** | 200 feet |
| **NUMBER OF STORAGE TANKS** | 38 |

## APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST CERTIFICATION

Facility Name Coastal Energy Corporation

If a facility answers "Yes" to any of these questions, it will need a Facility Response Plan instead of a SPCC Plan.

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   _____Yes X___No

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any above ground oil storage tank area?

   _____Yes X___No

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

   X___Coastal acknowledges _____No
   that USEPA has made this determination

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

   _____Yes X___No

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years?

   _____Yes X___No

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

David Montgomery

**Name:** David Montgomery **Date:** 03/26/2015

**Title:** President

**FRP PLAN REVIEW**
**Coastal Energy Corporation**

**Minor edits or changes should be made directly to this plan by the FRP administrator or Qualified Individual onsite and the date of any revision should be noted below. These types of changes include:**

- Changes in personnel on the emergency contact list
- Removal of small tanks
- Minor changes in plant facilities

| Date Amended | Personnel Making Changes | Pages Replaced | Summary of Changes |
|---|---|---|---|
| 9/29/2014 | B. Henderson | Appendix B | Edit of Planning distance calculations per EPA |
| 11/12/2014 | B. Henderson | P. 7 | Addition of boom to facility inventory |
| 12/4/2014 | B. Henderson | Table 2.0 information edited | Haz-Mat One OSRO Equipment Inventory added |
| 12/4/2014 | B. Henderson | Appendix A removed | Appendix A Removed |
| 12/12/2014 | B. Henderson | p. 20, 23 & 29 | Addition of WCD calculations for ethanol |
| 12/12/2014 | B. Henderson | Appendix B | Edit to Planning distance calculations using Chezy-Manning equation |
| 2/06/2015 | B. Henderson | Table 1.1 | Additional contact information added |
| 2/16/2015 | B. Henderson | Updated Section numbering | Updated Section numbering to reflect CFR requirement. |
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## Introduction

As regulated under 40 CFR 112, owners or operators of facilities that pose a threat of substantial harm to the environment by discharging oil into water bodies or a joining shorelines are required to prepare and submit facility specific response plan (FRP) to the United States Environmental Protection Agency. A threat of substantial harm includes facilities that have more than 1,000,000 gallons oil storage and are located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments. One of the objectives of this FRP is to provide the necessary planning tools to successfully address a worst case scenario discharge event.

The FRP helps an owner or operator develop a response organization and ensure the availability of response resources (i.e., response equipment, trained personnel) needed to respond to an oil discharge. The FRP also demonstrates that the response resources are available in a timely manner, thereby reducing a discharge's impact and severity. The FRP also helps a facility owner or operator improve discharge prevention measures through the early identification of risks at the facility. In addition, FRPs aid local and regional response authorities to better understand the potential hazards and response capabilities in their area.

The plan will be periodically reviewed and updated to ensure the facility description, response capabilities, and release scenario represent current facility practices. The plan will also be updated to address changes in the regulations or upon notification of regulatory authorities that the plan should be updated to be consistent with regulations. At a minimum, yearly reviews will be conducted. The Plan will be available during normal business hours at the company headquarters.

# 1.0 Emergency Response Plan (stand-alone document)

## 1.1 Emergency Response Action Plan

Several sections of this response plan are bound separately and kept in the front of this binder for easy access by response personnel during an actual emergency or oil spill. This binder is the Emergency Response Action Plan, which is intended to contain as much information as necessary to respond to an emergency or spill and is arranged so response actions are not delayed.

The Emergency Response Action Plan consists of the following sections:

- Qualified Individual Information
- Emergency Notification Phone List
- Spill Response Notification Form
- Response Equipment List and Location
- Response Equipment Testing and Deployment
- Facility Response Team Information
- Evacuation Plan
- Facility Diagrams

## 1.2 Facility Information

**Date of Last Update __MAY 2014_____**

| | | | | | |
|---|---|---|---|---|---|
| **Facility name:** | **Coastal Energy Corporation** | | | | |
| **Location: (Street Address)** | **234 Burnham Road** | | | | |
| **City:** | **Willow Springs** | **State:** | **Missouri** | **Zip:** | **65793** |
| **County:** | **Howell** | **Phone Number** | | **(417) 469-2777** | |
| **Latitude:** | **36$^0$ 58' 31" N** | | **Longitude:** | **91$^0$ 57' 7" W** | |
| **Wellhead Protection Area:** | **The facility is not located within a wellhead protection area** | | | | |
| **Owner:** | **David Montgomery – President** | | | | |
| **Owner Address:** | **1 Coastal Drive, Willow Springs, Missouri 65793** | | | | |
| **Plant Manager:** | **Scott Altermatt** | | | | |
| **Qualified Individual:** | | | | | |
| | **Name:** | **Gary Picard, Safety Officer** | | | |
| | **Position:** | **Safety Officer** | | | |
| | **Phone Number:** | **(417)469-2777O, (417)469 3312 H (417) 855-0194 C** | | | |
| **Training** | **Annual Facility Response Training** | | | | |
| **Other Qualified Individuals on site include Company President and Plant Manager, they can be reached at (417) 469 2777** | | | | | |
| **Date Facility Started Operation:** | **2003** | | | | |
| **Current Operation:** | **The facility stores ethanol, asphaltic oil, diesel and various polymers** | | | | |
| **SIC Code:** | **1422** | | | | |
| **Maximum Oil Storage Capacity** | **2,812,000 gallons** | | | | |
| **Largest in-service oil Storage Tank** | **420,000 gallons** | | | | |

## 1.3 Emergency Response Information

Information provided in this section describes what is necessary in the event of an actual emergency involving the discharge of oil or a combination of hazardous substances and oil discharge. The emergency response information section of the plan includes the following components:

- An emergency notification phone list in section 1.3.1 to identify and prioritize the names and phone numbers of organizations and personnel that must be notified immediately in the event of emergency. COASTAL maintains a list of 24 hour contact numbers at the operations headquarters. These numbers should be verified each time the plan is revised.
- Emergency response personnel will have appropriate response training. Response time will vary based on time of day and personnel activities.
- A spill response notification form (Form 1) will be provided to the National Response Center (NRC) and other emergency response personnel as appropriate.
- Table 2.0 lists oil spill response equipment available for an Oil Spill Response Organization (OSRO) and other available on site. When appropriate the listing should describe the size of release that the emergency response equipment can handle and any limitations.
- Description in section 1.8.1.2 of response equipment testing and deployment.
- A list of personnel in section 1.3.4.
- List of factors in section 1.3.5 that should be considered when preparing the evacuation plan.

### 1.3.1 Emergency Spill Notification Form

| FORM 1 - SPILL NOTIFICATION INFORMATION FORM | | | |
|---|---|---|---|
| Reporter's Last Name: | First: | Middle Initial: | Reporter's Company Position: |
| Phone Number(s) : | | | |
| Facility Name:<br><br>COASTAL ENERGY CORPORATION | Owners Name:<br><br>DAVID MONTGOMERY-President | Organization Type :<br><br>SIC CODE 1422 | |
| 232 Burnham Road, Willow Springs | | State: MISSOURI Zip:65793 | |
| Were Materials Released: (Y/N) | | Confidential : (Y/N) | |
| Meeting Federal Obligations to Report :(Y/N) | | Date Called: | |
| Calling for Responsible Party: (Y/N) | | Time Called: | |
| **Incident Description** | | | |
| Source and/or Cause of Incident: | | | |
| Date: | | Time of Incident: | |
| Incident Address/Location : | | | |
| Container Types: ethanol, asphaltic oil, fuel oil, polymer Tank Capacity:<br>Units: gallons | | | |
| Facility Capacity: 2,812,000 Units: gallons | | | |
| Facility Latitude: 36 degrees 58' 31" N | | | |
| Facility Longitude: 91 degrees 57' 7" W | | | |

**Emergency Contact Information**

The contact list and telephone numbers for those individuals / agencies who must be contacted in case of a discharge are provided in **Table 1.0**

**Table 1.0 Emergency Contacts**

| CONTACT | RESPONSIBLE ROLE | PHONE NUMBER |
|---|---|---|
| <u>Primary contact</u><br>Gary Picard Safety Officer<br><br><u>Secondary contact</u><br>Scott Altermatt<br>David Montgomery | <br>Notification to agencies; Emergency Response initiation<br><br>Notification to agencies; Emergency Response initiation | (417) 469-2777 Office<br>(417) 469 3312 Home<br>(417) 855-0194 Cell<br><br>(417 ) 252 1060 cell<br>(417) 252 1050 cell |
| GOVERNMENTAL CONTACTS | | |
| National Response Center | Incident reporting (if required) | 1 (800) 424-8802 |
| Federal On-Scene Coordinator<br>(EPA Region VII) | Incident reporting; Spill response assistance | (913) 281-0991 or<br>(913) 551-7000 |
| State Emergency Response Commission (SERC) | Incident reporting | 1 (800) 780-1014 |
| Missouri Department of Natural Resources | Incident reporting; Spill response assistance | (573) 634-2436 |
| Fire Department / Police Department | Traffic and crowd control; Evacuation | 911 |
| EMERGENCY RESPONSE CONTRACTORS: | | |
| Haz-Mat-One (OSRO Contractor)<br><br>Environmental Works, Inc. | Spill response and clean up resources | 800-229-5252<br><br>(417) 890-9500 (office)<br>(877) 827-9500 (24-hour) |
| OTHER CONTACTS | | |
| National Weather Service (St. Louis, MO) | Weather reports | (636) 441-8467 |
| KUKU 100.3<br>1450 NEWS RADIO KWPM<br>KSPQ 93.9 | Public information | (888) 581-4487<br>(417 256 1025<br>(417) 256 1025<br>(417) 256 3131 |
| Missouri One-Call | Utility location | 1(800) 344-7483 |
| Texas County Memorial Hospital<br>716 Main St. Cabool, MO<br>Mercy St Francis Hospital<br>100 W Hwy 60 Mountain View , MO<br>Ozarks Medical Center<br>1100 Kentucky Ave, West Plains, MO | Medical assistance | (417) 962-5303<br><br>(417) 934-7000<br><br>(417) 256-9111 |

**Table 1.1** provides contact information for other potential contacts that may need to be contacted dependent upon the situation. These contacts include neighboring facilities as well as railroad contact information.

**Table 1.1 Potential Emergency Contacts (situational)**

| | | |
|---|---|---|
| **OTHER CONTACTS** | | |
| **BNSF Local Master** | **Contact for a situation which may affect or include the rail spur or adjacent railroad** | **(417) 829-2136<br>(417) 693-2403<br>(888) 428-2673<br>(417) 861-4009** |
| **NEIGHBORING FACILITIES** | | |
| **Waste Water Treatment Plant** | **Downstream neighbor** | **417-252-7007** |
| **G & W Foods** | **Neighboring facility** | **417-469-4000** |
| **Camcorp Manufacturing** | **Neighboring facility** | **417-469-4807** |
| **Jasper Engines** | **Neighboring facility** | **417-469-3910** |
| **Railroad materials** | **Neighboring facility** | **417-934-2260** |
| **Midwest Walnut** | **Nearby facility** | **417-469-2161** |
| **Comfort Inn** | **Nearby facility-potential lodging for responders** | **417-469-0410** |
| **Open Range Restaurant** | **Nearby facility** | **417-469-9999** |
| **Prewitt's Collision Repair** | **Neighboring facility** | **417-469-2263** |
| **OTHER CONTACTS** | | |
| **Mercy Clinic** | **Nearby medical support** | **417-469-1820** |
| **Eleven Point Rural Fire** | **Supplemental Response assistance** | **417-469-9111** |
| **Willow Springs City Hall** | **Public information/assistance** | **417-469-2107** |

### 1.3.2 OSRO Spill List

**Table 2.0 Oil Spill Response Organization OSRO Spill List**

## OSRO Equipment List, Haz-Mat One

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| 2000 # Carbon Filter - High Pressure | 1 | 1 | | | |
| Nilfisk/HEPA Decontamination Unit | 2 | 2 | | | |
| HEPA Vac | 4 | 3 | | | |
| Mercury Vac | 2 | 2 | | | |
| 45' Office Trailer/River Trailer | 1 | 1 | | | |
| 35' Office Trailer/River Trailer | 1 | | | | |
| Mobile Office Trailer | 1 | 1 | | | |
| 16' Response Truck | 5 | 2 | 1 | | 1 |
| 125 GPM Air Stripper | 1 | 1 | | | |
| Sand Blasting Equipment | 1 | 1 | | | |

## Transportation

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| 3/4 Ton or Smaller | 25 | 11 | 6 | 4 | 3 |
| 45' Equipment Trailer | 5 | 5 | | | |
| Lowboy Trailer | 3 | 1 | 1 | 1 | |
| 1 ton 4x4 | 7 | 2 | 2 | 1 | 1 |
| 1.5 Ton Stakebed w/ Liftgate | 5 | 2 | 1 | 1 | 1 |
| End Dump | 2 | | 1 | 1 | |
| Vac Truck (3,000 gallon) (70 Barrel) | 9 | 4 | 3 | 1 | 1 |
| Vac Tanker (5,000 gallon) | 1 | 1 | | | |
| Semi Tractor | 6 | 3 | 1 | 2 | |
| Haz Roll-off (varies at each location) | 38 | 16 | 4 | 12 | 6 |
| Non-Haz Roll-off | 4 | 2 | 1 | 1 | |
| Roll-off Truck (10 wheel) | 3 | 1 | | 1 | 1 |
| Roll-off Trailer | 3 | 1 | 1 | 1 | |
| Guzzler Dry Vac | 5 | 1 | 3 | 1 | |
| Gator (4x4) | 3 | 2 | | 1 | 1 |
| Dump Truck | 3 | 1 | 1 | 1 | |
| Guzzler Support Trailer | 3 | 1 | 2 | | |
| Vacuum Box | 2 | 1 | 1 | | □ |
| 10,000 Gallon Mini Frac Tank (240 Barrel) | 4 | 2 | | 1 | 1 |
| 21,000 Gallon Frac Tank | 1 | 1 | | | |

## Miscellaneous Tools and Equipment

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| Portable Light Set | 10 | 5 | 1 | 1 | 1 |
| Portable Generator | 10 | 5 | | 1 | 1 |
| Non-Sparking Tool Set | 1 | 1 | | | |
| Portable Oxy/Act. Unit | 5 | 1 | 1 | 1 | 1 |
| Ladder | 19 | 10 | 6 | 1 | 1 |
| 55 Gallon Drum DOT | 275 | 100 | 75 | 25 | 25 |
| Leaf Blower | 15 | 5 | 3 | 1 | 1 |
| Wet/Dry Electric Vacuum | 14 | 6 | 2 | 2 | 2 |
| High Intensity Light Plant | 7 | 3 | 1 | 1 | 1 |
| 185 cfm Air Compressor | 5 | 1 | 2 | 1 | 1 |
| 95 Gallon Poly Overpack | 65 | 20 | 10 | 15 | 10 |
| 110 Gallon Poly Overpack | 6 | 6 | | | |
| 85 Gallon Steel Overpack | 60 | 20 | 10 | 10 | 10 |
| 55 Gallon Stainless Steel Drum | 6 | 6 | | | |
| Chain Saw | 9 | 4 | 1 | 1 | 1 |
| First Aid Kit | 39 | 20 | 5 | 4 | 6 |
| Life Jacket | 40 | 10 | 10 | 5 | 5 |
| Retrieval Tripod System | 4 | 2 | 1 | 1 | |
| Intrinsically Safe Blower | 6 | 3 | 2 | 1 | |
| Intrinsically Safe Light | 16 | 3 | 4 | 4 | 5 |
| Betts Emergency Valve | 2 | 1 | | 1 | |
| 55 Gallon Poly | 50 | 20 | 5 | 5 | 10 |
| 3000 PSI Hot Water Pressure Washer | 8 | 3 | 3 | 1 | 1 |
| 1500 PSI Cold Water Pressure Washer | 3 | | 1 | 1 | ☐ |

## Construction Equipment

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| Uniloader | 5 | 2 | 1 | 1 | 1 |
| Backhoe | 1 | | 1 | | 1 |
| Fork Lift | 2 | 2 | | | |
| 21/2 Ton Stakebed Truck | 1 | 1 | | | |
| Portable Welder | 4 | | 2 | 1 | 1 |
| Drum Grabber | 16 | 10 | 3 | | 1 |
| Trackhoe (JD 30 - JD 60) mini | 4 | 1 | 1 | 1 | 1 |
| Trencher (uniloader mount) | 1 | | | 1 | |
| Sweeper (uniloader mount) | 1 | 1 | | | |

| | | | | | |
|---|---|---|---|---|---|
| Planer (uniloader mount) | 1 | | 1 | | |
| Toolcat | 1 | | 1 | | |
| Wheel Loader | 3 | 1 | 1 | 1 | |
| Excavator (JD 200) | 1 | | | 1 | |
| D 6 Dozer with Winch | 1 | | | 1 | |
| Excavator CAT 315 | 1 | 1 | | | |
| Kubota Tractor | 1 | | | 1 | |
| Hydro Seeder | 1 | | | 1 | |
| Straw Blower | 1 | | | 1 | |

## Oil Spill Equipment

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| 3000 Gallon Poly Tank | 13 | 3 | 3 | 2 | 4 |
| 2000 Gallon Poly Tank | 2 | | | | |
| 1500 Gallon Poly Tank | 8 | 3 | 5 | | |
| Small ACME Skimmer | 4 | 3 | 1 | | |
| 18" Boom | 800 | 500 | 0 | 0 | |
| 10" Containment Boom | 4750 | 1200 | 800 | 1500 | 1300 |
| 10" Fast Water Boom | 1050 | 850 | | | 200 |
| Absorbent Boom 8"x40' Bundle | 165 | 70 | 30 | 10 | 25 |
| Absorbent Pad Bundle | 108 | 40 | 20 | 20 | 8 |
| Particulate Absorbent Pallet | 8 | 4 | 1 | 1 | 2 |
| Wash-down Pump (floating) | 5 | 3 | 1 | | |
| Large Drum Skimmer TDS 118 | 4 | 1 | 1 | 1 | 1 |
| Grooved Drum Skimmer TDS 118 | 1 | 1 | | | |
| Small Drum Skimmer Mini Max | 3 | 1 | 1 | 1 | |
| Acme Skimmer (Duckbill) | 1 | | | | |
| Skim Pac (Slurper) | 3 | 1 | 1 | | |
| River Trailer 26' | 1 | 1 | | | |
| Work Boat 18' or less with Motor | 6 | 2 | 1 | 1 | 1 |
| River Trailer 16' | 2 | | 1 | | |

## Communications

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| Mobile Radios | 63 | 25 | 17 | 12 | 6 |
| 2 Way FM Hand Radio | 50 | 18 | 16 | 3 | 9 |
| Laptop with Wireless | 16 | 6 | 4 | 2 | 2 |

## Pumping Equipment

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| Submersible Pump | 14 | 6 | 2 | 1 | 2 |
| 2" SS Diaphragm Pump | 2 | 2 | | | |
| 3" SS Diaphragm Pump | 1 | 1 | | | |
| 2" Poly Diaphragm Pump | 5 | 2 | 2 | 1 | |
| 1" Diaphragm Pump | 3 | 3 | | | |
| 3" Diaphragm Pump | 2 | 2 | | | |
| 2" Chemical Hose | 490 | 250 | 120 | 120 | |
| 2" Hydrocarbon Hose | 1500 | 1000 | 250 | 50 | 160 |
| 3" Hydrocarbon Hose | 1170 | 1000 | 100 | | 70 |
| 3/4" PCB Pump | 1 | 1 | | | |
| 2" Trash Pump | 29 | 20 | 1 | 1 | 4 |
| 3" Trash Pump | 9 | 4 | 1 | 1 | 1 |
| 3" Sludge Pump | 1 | | 1 | | |
| 4" Trash Pump | 2 | 2 | | | |
| 6" Dewatering Pump | 1 | 1 | | | |

## Chemical Response Equipment

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| SCBA | 42 | 22 | 6 | 8 | 6 |
| Manifold Breathing System | 5 | 2 | 1 | 1 | 1 |
| Full Face Respirator | 73 | ? | 17 | 10 | 9 |
| Powered Respirator | 3 | 3 | | | |
| Level A Suit | 26 | 12 | 2 | | 8 |
| Level B (Full Encapsulating) | 42 | 30 | 3 | 5 | 4 |
| Flash Suit | 4 | 4 | | | |
| Low Pressure - Transfer Trailer | 1 | 1 | | | |
| IDLH Trailer | 1 | 1 | | | |
| Response Trailer | 4 | 1 | 1 | 1 | 1 |
| Mercury Response Trailer | 1 | 1 | | | |
| Chlorine B Kit | 2 | 1 | 1 | | |
| Chlorine C Kit | 1 | 1 | | | |
| Modified C Kit for N2O4 | 2 | 1 | 1 | | |
| Chlorine A Kit | 1 | 1 | | | |
| Magnetic Patch Kit | 2 | 1 | 1 | | |
| Midland Kit | 2 | 1 | 1 | | |

| | | | | | |
|---|---|---|---|---|---|
| Mercury Vac | 2 | 2 | | | |
| Mobile Office Trailer | 1 | 1 | | | |
| 16' Response Truck | 5 | 2 | 1 | | 1 |

## Air Monitoring and Detection Equipment

| | Total | Olathe | North Platte | Great Bend | Omaha |
|---|---|---|---|---|---|
| 4-Gas with PID | 6 | 2 | 1 | 1 | 1 |
| Radiation Meter | 2 | | 2 | | |
| Dräger Color Metric Kit | 6 | 2 | 1 | 1 | |
| Carbon Monoxide Gas Meter | 3 | | | | 3 |
| JEROME Mercury Detector | 1 | 1 | | | |
| 4-Gas Dräger | 17 | 8 | 4 | 2 | 2 |

### 1.3.2.1 Coastal Energy Emergency Equipment List and Location

Coastal will rely on OSRO and other emergency contractors to respond to a spill. Coastal does maintain response equipment inventory sufficient to only address smaller and medium spills. Table 3 identifies the type and location of the emergency response equipment, including personal protective equipment available at the facility. These materials should be routinely inventoried and inspected. They should also be replenished or replaced as needed.

**Table 3.0 Emergency Equipment**

| COASTAL EMERGENCY EQUIPMENT | Material is in emergency trailer<br>Equipment is staged by warehouse |
|---|---|
| 9-Safety Cones | 5-Bags Granular Absorbent |
| 1 –Axe | 10-Bags Sphag Sorb |
| 2-Heavy Rock Rake | 50-18”X18” White Oil Only Sorbent Pillows |
| 4-Shovels | 14-18”X8” White Oil Only Sorbent Pillows |
| 1-Broom | 200-17”X19” White Oil Only Sorbent Pads |
| 5-Hard Hats | 1-38”X144’ White Oil Only Sorbent Roll |
| 5-Face Shields | 32-2”X4’ White Oil Only Socks |
| 5-Safety Glasses | 7-2”X8’ White Oil Only Socks |
| 1-Tyvek Suits | 3-4”X8’ White Oil Only Booms |
| 4-Multi-purpose Coveralls | 8-8”X10’ White Oil Only Booms |
| 3-TYPE 270 Oil Absorbent Booms | Caterpillar TC-30 Forklift Hard Surface Only 2500lb capacity |
| Lull 944 E 42’ boom fork attachment | 3000 Ford Tractor with 5’ Box Blade |
| Case 621 B articulating rubber tire loader 3 yd. bucket | 225 Caterpillar skid steer with 1yrd bucket attachment and forklift attachment. |
| 1988 Ford Dump Truck | Caterpillar TC-30 Forklift Hard Surface Only 2500lb capacity |
| 1991 Toyota Pickup | JLG Man Lift 80HX 500lb capacity |
| 1 Service Truck with 3” product pump | Skirted hard boom |
| 1 3” Gas Powered Trash pump | |

### 1.3.3 Response Equipment Testing and Deployment Drills

The types of exercises/drills required under the National Preparedness for Response Exercise Program (PREP) and their frequency are listed in the table below.

**Exercises / Drills Schedule**

| DRILL | FREQUENCY |
|---|---|
| Internal Call Out/ Qualified Individual (QI) Notification | Quarterly |
| Spill Management Team Tabletop | Annually |
| Equipment Deployment - facility with Oil Spill Response Organization (ORSO) response equipment cited in plan | ANNUALLY<br>(TO BE CONDUCTED BY OSRO) |
| | |

The scope and objectives of the QI Notification, Spill management team tabletop, and equipment deployment (facility with OSRO cited in the plan) exercises/drills are described below:

1. QI Notification Exercises

   Scope: Exercise communications between the facility personnel and the QI

   Objectives: Contact must be made with a QI or designee, as designated in the response plan.

2. Spill Management Team Tabletop Exercise

   Scope: Exercise the spill management team's organization, communication, and decision-making in making a spill response.

   Objectives: Exercise the spill management team in a review of:

   - Knowledge of the response plan
   - Proper notifications
   - Communication system
   - Ability to access an ORSO
   - Coordination of internal organization personnel with responsibility for spill response
   - An annual review of the transition from a local team to a regional or national team
   - Ability to effectively coordinate spill response activity with the National Response System. If the personnel from NRS are not participating in the exercise then the spill

management team should demonstrate knowledge of the response coordination with NRS

At least one management team tabletop exercise in a triennial cycle would involve simulation of a worst-case discharge scenario.

3. Equipment Deployment Exercises - Facilities with OSRO response equipment cited in their response plan. (note: The OSRO is responsible for conducting these exercises.)

Scope:

- Deploy and operate response equipment identified in the response plan. The equipment to be deployed would be the minimum amount of equipment for deployment and is described in "guiding principles."
- All of the OSRO's personnel involved in equipment deployment operations must be included in a comprehensive training program.
- All of the OSRO's equipment must be included in a comprehensive maintenance program. It should be taken for equipment deployment conducted during training.
- The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO is documented. The OSRO must provide inspection and maintenance information to the owner or operator.

Objectives:

- Demonstrated ability of the personnel to deploy and operate response equipment.
- Ensure the response equipment is in proper working order.

### 1.3.4 Personnel

**List of Employees and Duties**:

Gary Picard - Safety officer and Qualified Individual (QI). Plans for and conducts training, addresses spill response activities at the plant and coordinates response for actual spill. Gary will be the final decision maker on evacuation of the facility in a worst case scenario and on spill clean-up of any size.

In the event Gary is unavailable then Scott Altermatt - will be secondary QI. Scott is the facility manager and head of maintenance. In the event Gary and Scott are not available then David Montgomery, President, will be the QI.

Garry Barton- Plant manager, responsible for plant operations, scheduling other employees, unloading rail cars, trucks, pulling samples for testing, truck loading, plant maintenance, etc.

**Staff**

Gary Roberts- Plant maintenance, hooking up rail cars for heating, unloading cars and trucks, loading trucks, making sure shipping papers are in order, etc.

Marty Makowlski- Responsible for proper blending of PMA asphalt, operation of skid system, operation of blower system, lab testing, boiler operation and maintenance, assists with unloading of rail cars and trucks, and loading of trucks for outbound shipments. Also, assists with general plant maintenance and operation.

Table 4 summarizes Coastal Response Personnel information.

**Table 4.0 Coastal Response Personnel**

| NAME | PHONE | RESPONSE TIME | RESPONSIBILITY DURING RESPONSE ACTION | QUALIFICATIONS/ TRAINING |
|---|---|---|---|---|
| Gary Picard | (417) 855 0194 | 5 minutes | QI/Safety Officer | QI- authority and training to mobilize appropriate resources |
| Scott Atlermatt | 417 252 1060 | 5 minutes | Alternate QI | Authority and training to mobilize appropriate resources |
| David Montgomery | 417 252 1050 | 5 minutes | Alternate QI | Authority and training to mobilize appropriate resources |

### 1.3.5 Evacuation Plan

Based on the analysis of this facility, a emergency evacuation plan has been developed to the help identify response activities and detail evacuation processes for most emergencies. This plan is available on site with the QI. Personnel safety should be considered at all times during the spill response. Evacuation routes and evacuation regrouping areas are shown on figure 2.

In case of an evacuation all employees will be notified by alarm and through radios (by safety officer or his designee) and will receive instructions as to the selection of a predetermined rendezvous location. Employees will exit in an orderly fashion. The safety officer will make certain all employees are accounted for and await further instruction from first responders.

After an all clear, employees will receive further instruction.

Notable safety issues will be crossing the active rail line to established rally point 1 and rally point 2. The proximity of Ethanol tanks in case of a fire or explosion and the location of the oil storage tanks make the designated rally points attractive to allow for ingress/egress of response vehicles and provide a safe distance to ensure employee safety.

During evacuation consideration should be given to the following factors:

- Location of stored materials 30,000 gallon Ethanol tanks and 420,000 Asphaltic Oil tanks are very close to the facility operations building. Locations are shown in figure 2.
- Hazards imposed by spilled material - Ethanol is highly combustible. All tanks of various oils and materials should be considered in the event of an evacuation.
- Flow direction of the spill the flow direction of the material released will dictate evacuation paths. Generally speaking the topography of the site ensures the flow will be down gradient to the levee and contained along the levee system to the secured outfall.
- Prevailing wind direction and speed - wind direction and speed should also be taken in consideration during the evacuation.
- Arrival route of emergency response equipment and personnel. There is only one ingress and egress to the facility along Burnham road. This is the reason for the evacuation routes chosen in figure 2, to stay out of the way of incoming emergency equipment.
- Evacuation route - The decision to evacuate will be made by the Safety Officer and QI. Predetermined route paths will be taken given local environmental factors and the type of emergency.

### 1.3.6 Qualified Individual Duties

The qualified individual (QI):

Has the authority to commit monies for spill response and the responsibility and authority to take such action as necessary to protect human health and the environment. To ensure that fires, explosions, and releases do not occur, recur or spread to other areas, and to coordinate remedial actions with governmental agencies. Those major activities may include stopping operations, collecting and containing release materials, and removing or isolating containers. If the facility operations are stopped, the QI must visually monitor area for leaks, pressure buildup, gas generation, ruptures in valves, pipes, or other equipment, wherever appropriate.

To perform these functions the QI will:

- Activate internal alarms and hazard communication systems to notify all facility personnel
- Notify all response personnel as needed
- Identify the character, exact source, amount, and extent of the release, as well as other items needed for notification
- Notify and provide necessary information to the appropriate authorities with designated response rolls

- Processes interaction of the spilled substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment
- Process the possible hazards of the release (direct and indirect) to human health and the environment
- Assess and implement prompt removal actions to contain and remove the substance released
- Coordinate rescue and response actions as previously arranged with all response personnel
- Obtained authority to immediately access company funding to initiate cleanup activities and direct cleanup activities until properly relieved of his responsibilities

## 1.4 Hazard Evaluation

Hazard identification and evaluation assists facility owners and operators in planning for potential releases. This can potentially reduce the severity of discharges that may occur. The evaluation will also enable the operator to identify and correct potential sources of releases, identify special health and safety hazards to workers and emergency response personnel, and review the facility's spill history.

### 1.4.1. Hazard Identification

No surface impoundments for liquid wastes or waste containing free liquids are in place at this facility. The following List of instructions was used to complete the hazard identification form for tanks

- Tank number Identify each tank at the facility that is used to store oil or hazardous materials. List each tank with a separate and distinct identifier.
- Substance stored Report the material that is stored in each tank identified if the tank is used to store more than one material, list all stored materials.
- Quantity stored For each material stored in the tank, report the average volume of material (gallons) stored on any given day.
- Tank type for each tank report the type of tank, for example field constructed steel (FCS) or double walled, and the year the tank was originally installed.
- Maximum capacity Recording the operational maximum capacity gallons for each tank. If the maximum capacity varies with the season, record the upper and lower limits.
- Failure/cause Record the cause and date of any tank failure that resulted in a loss of tank contents

**Table 5.0 Hazard Identification of Tasks**

| Tank Number | Product | Capacity | Type / Year | Failure Cause | Secondary Containment (gallons) |
|---|---|---|---|---|---|
| A-1 | ETHANOL | 30,000 | DOUBLE WALL 2005 | NONE | 65,000 |
| A-2 | ETHANOL | 30,000 | DOUBLE WALL 2005 | NONE | 65,000 |
| A-3 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-4 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-5 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-6 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-7 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-8 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-9 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| A-10 | ETHANOL | 30,000 | FCS 2006 | NONE | 65,000 |
| F-1 | FUSEL | 20,000 | PURCHASED 2012 | NONE | 23,500 |
| F-2 | FUSEL | 20,000 | PURCHASED 2012 | NONE | 23,500 |
| 1 | ASPHALTIC OIL | 30,000 | USED 2004 | NONE | EARTH BERM |
| 2 | ASPHALTIC OIL | 30,000 | USED 2004 | NONE | EARTH BERM |
| 3 | ASPHALTIC OIL | 30,000 | USED 2004 | NONE | EARTH BERM |
| 4 | ASPHALTIC OIL | 30,000 | USED 2004 | NONE | EARTH BERM |
| 5 | ASPHALTIC OIL | 30,000 | USED 2004 | NONE | EARTH BERM |
| 6 | ASPHALTIC OIL | 30,000 | USED 2004 | NONE | EARTH BERM |
| 7 | ASPHALTIC OIL | 210,000 | FCS 2009 | NONE | EARTH BERM |
| 8 | ASPHALTIC OIL | 410,000 | FCS 2008 | NONE | EARTH BERM |
| 9 | ASPHALTIC OIL | 410,000 | FCS 2008 | NONE | EARTH BERM |
| 10 | ASPHALTIC OIL | 420,000 | FCS 2009 | NONE | EARTH BERM |

| Tank Number | Product | Capacity | Type / Year | Failure Cause | Secondary Containment (gallons) |
|---|---|---|---|---|---|
| 11 | ASPHALTIC OIL | 420,000 | FCS 2009 | NONE | EARTH BERM |
| 12 | ASPHALTIC OIL | 30,000 | FCS 2010 | NONE | EARTH BERM |
| 13 | ASPHALTIC OIL | 30,000 | FCS 2010 | NONE | EARTH BERM |
| 14 | ASPHALTIC OIL | 30,000 | FCS 2010 | NONE | EARTH BERM |
| 15 | ASPHALTIC OIL | 30,000 | FCS 2010 | NONE | EARTH BERM |
| 16 | POLYMER | 30,000 | FCS 2011 | NONE | EARTH BERM |
| 17 | POLYMER | 30,000 | FCS 2011 | NONE | EARTH BERM |
| 18 | ASPHALTIC OIL | 30,000 | FCS 2011 | NONE | EARTH BERM |
| 19 | ASPHALTIC OIL | 30,000 | FCS 2011 | NONE | EARTH BERM |
| 20 | ASPHALTIC OIL | 30,000 | FCS 2011 | NONE | EARTH BERM |
| 21 | ASPHALTIC OIL | 30,000 | FCS 2011 | NONE | EARTH BERM |
| 22 | ASPHALTIC OIL | 30,000 | FCS 2013 | NONE | EARTH BERM |
| 23 | ASPHALTIC OIL | 30,000 | FCS 2013 | NONE | EARTH BERM |
| 24 | ASPHALTIC OIL | 30,000 | FCS 2013 | NONE | EARTH BERM |
| B1 | DIESEL | 12,000 | FCS 2013 | NONE | EARTH BERM |
| WC-1 | WATER | 20,000 | FCS 2014 | NONE | EARTH BERM |
| LP-1 | LP | 8,650 | PURCHASED USED | NONE | EARTH BERM |
| LP-2 | LP | 8,650 | PURCHASED USED | NONE | EARTH BERM |
| Transformer | Transformer oil | 175 | Installed 2013 | NONE | EARTH BERM |

## Transfer Operations

Asphaltic oil blends, polymers, ethanol and diesel are delivered by railcar and tanker truck to this facility. The various products are measured and recorded daily. Delivery amounts vary based on tank inventory.

**Loading and Unloading Operations**

Tank cars and tank trucks maybe loaded and unloaded at this facility as described in the Spill Prevention Control and Countermeasures Plan. The average transfer of a tank car is 18,000 to 25,000 gallons; the average transfer volume of a tank truck is 7,000 gallons. Secondary containment in the loading/unloading area is secured by the perimeter berm that surrounds the down gradient portion of the facility. There is no special secondary containment in the loading/unloading area.

**Day to Day Operations**

In 2013 over 14 million gallons of product was transferred into and out of this facility. Seasonally the asphaltic oil operations are more active during the warmer part of the year.

**Normal Daily Throughput**

The approximate normal daily throughput for this facility is 80,000 gallons per day.

## Secondary containment volumes

There are two levels of protection at the Coastal site. The levee/dike system the surrounds the plant and there are two secondary containment areas for some of the tanks. The dike/levee system is capable of stabilizing a volume of 4,081,000 gallons. The secondary containment for the 17,500 gallon #2 diesel tank is capable of holding 21,991 gallons of product. The Ethanol and Fusel above ground storage tanks are equipped with secondary containment to store 69,175 gallons. The net volume capacity needed for the tanks plus stormwater is 33,000 gallons and the secondary containment capacity allowing for displacement is 49,203 gallons. Given the total storage capacity of the plant is 4,081,000 gallons within the bermed area; this storage capacity is more than adequate for the total petroleum product storage capacity at the facility.

## 1.4.2 Vulnerability Analysis

The following section describes the potentially sensitive areas within the 25-mile (see Appendix B) planning distance. The primary concerns for substantial harm that could be caused by a major spill that reached the Eleven Point River. There is no public water intake on the Eleven Point River. The area is sparsely populated and the facility is located outside the Willow Springs business district. In the unlikely event that an oil spill at the facility would discharge to the Eleven Point River, COASTAL shall use every means necessary to remediate and recover contamination causes by a failure at its facility. Highway 63 would not be impacted by an oil spill due to the elevation of the highway in relationship to the river at this area.

At this section of the water body this is listed as a 303d losing stream. No flow has been observed during several on-site visits. The stream is typically a dry channel with intermittent pools of standing water. Access to remediate a cleanup in the stream channel is excellent given the percentage of time this stream has little to no water flow at this location. The river with sustainable flow is approximately 15 miles downstream.

The only endangered species that may exist near the area include the Mooneye, Ozark Shiner, Checkered Madtom and the Southern Cavefish. The best way to limit the impact to these species is to stop any discharge to the river as soon as possible.

### 1.4.3 Analysis for a Potential for a Spill

The analysis of the potential for a spill considers tank age, spill history, horizontal range of a potential spill (in the dike containment area), and vulnerability to natural disaster. Those factors are discussed below:

Tank age - most tanks at this facility are less than 10 years old; therefore, tank age is not a major concern.
Spill history - there are no recorded spill event at the facility.
Horizontal Range of a Potential Spill - the dike are contains all of the surface drainage of this site, therefore there is no concern.
Vulnerability to Natural Disaster - the seismic area of the New Madrid Fault is only rated at .14 - .18% in this area of the state

### 1.4.4 Spill History

As described in 40 CFR Part 110, reportable spills are those that (a) violate applicable water quality standards, or (b) cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

There have been no reportable spills at this facility.

## 1.5 Discharge Scenarios

This section provides a description of the facility's worst case discharge, as well as small and medium discharges, as appropriate. A tiered planning approach has been used because the response actions to discharge (i.e., equipment, products and personnel) are dependent on the magnitude of the discharge. Planning for lesser discharges is necessary because the nature of the response may be qualitatively different depending on the quantity of the discharge.

### 1.5.1 Small and Medium Discharges

To address tiered planning requirements, Coastal has considered facility operations that could contribute to a small or medium discharge. A small discharge amount is less than 2,100 gallons. A medium discharge amount is between 2,100 and 36,000 gallons. Small and medium discharges may result from:

- Loading and unloading surface transportation. Loading and unloading of tank cars and tank
- trucks occurs at this facility.
- Facility maintenance. Minor drips and spills (less than 5 gallons) can occur from maintenance
- activities.
- Facility pumps and piping. A break in one of the facility pipes or small leak in one of the pumps
- can cause a small spill.

**Factors Affecting Small Discharge Response Efforts**

The Safety Officer and Qualified Individual (Gary Picard) will lead on site personnel. Mr. Picard and his staff will address small spills resulting from hose leaks, dripping seals, or other factors causing a release of 2,100 or less dependent on the material released.

For heavy oil products, diesel and polymer spills, the on-site staff will remediate with absorbent pads and loose material, removing the material to an approved storage vessel and disposing the material as required by regulation.

In the case of a highly flammable release (Ethanol) the following precautions apply:

Ethanol is colorless and highly flammable
Eliminate all ignition source, flames and sparks
Area must be well ventilated
Equipment used in handling the product must be grounded
Do not touch or walk through spilled material
Stop leaks only if you can do it without risk
A vapor suppressing alcohol resistant foam may be used
Alcohol breaks down in the film of regular foam
Absorb or cover with dry earth, sand or other noncombustible material
Evacuate the facility as necessary to predetermined rendezvous points

**Factors Affecting Medium Discharge Response Efforts**
On site personnel work to contain medium sized spills using equipment resources at the facility to trench and make temporary earthen dikes. Absorbent material will be applied as necessary to contain the material. A Qualified Emergency Contractor, (Environmental Works, Inc.) will be activated to respond and remediate the spill. Material will be placed in approved roll-off vessels and twill be treated as a Hazardous Waste until final disposal options are selected. Precipitation can affect response effort, but due to the viscosity of the material on site (exception Ethanol) vertical migration is unlikely. Natural drainage to the facility is toward the dike and levee system.

Deploy Qualified Contractor (Environmental Works, Inc.) and on site individuals to remediate the contamination. Material will be contained using booms or pads and disposed of in approved containers under the direction of the safety officer.

In the case of a highly flammable release (Ethanol) the following precautions apply:
Ethanol is colorless and highly flammable
Eliminate all ignition source, flames and sparks
Area must be well ventilated
Equipment used in handling the product must be grounded
Do not touch or walk through spilled material
Stop leaks only if you can do it without risk
A vapor suppressing alcohol resistant foam may be used
Alcohol breaks down in the film of regular foam
Absorb or cover with dry earth, sand or other noncombustible material
Evacuate the facility as necessary to predetermined rendezvous points

### 1.5.2 Worst Case Discharge
According to 40 CFR part 112, Appendix E (7)(2)(1), facilities that handle, store, or transport oil from different oil groups must calculate each group separately, unless the oil group constitutes 10 percent or less by volume of the facility's total oil storage capacity. The facility stores asphalt and ethanol in their

bulk storage tanks. The asphalt tanks are located within an earthen berm containment area. The ethanol tanks are within concrete containment that is also within the earthen berm containment area. Calculating the worst case discharge for each product gives a 420,000 gallon WCD for asphalt and a 30,000 gallon WCD for ethanol. Per 40 CFR 112.20 (J)(5)(i) the worst case planning quantity shall be the larger of the amounts calculated. Therefore the facility WCD value as well as the planning and response for WCD scenarios shall be 420,000 gallons.

When planning for the worst case discharge response, all the previous factors listed in the small and medium discharge sections of this Plan should be addressed. The worst case discharge for this facility is 420,000 gallons for the asphalt. This includes the largest tank within the bermed secondary containment. The worst case would not likely occur with any single problem associated with loading or unloading of surface transportation, facility maintenance, or facility pumps / piping. The worst case could occur in the event of a tornado, earthquake or in the event of a catastrophic fire.

Initial response will include on site personnel, (as described throughout this plan), staff will notify the Safety Officer who will in turn make an assessment of the incident and then make the notification calls to local, state or federal officials as appropriate. If rendered safe, the on-site personnel will work to contain the spill. Calls will be made to a Qualified Contractor (Environmental Works, Inc.) to deploy to the site and execute the remediation. Control valves will be turned to the closed position or secured otherwise. Seals and plugs will be used as necessary. All ignition sources will be secured to prevent a fire. If necessary, the facility will be evacuated and staff will be directed to pre-determined rally points dependent on existing environmental factors, such as weather and wind conditions.

## 1.6 Discharge Detection System

Tanks are visually inspected daily. There is an alarm system for overtopping of the asphaltic oil tanks. Aboveground storage containers, associated piping, and secondary containment systems are to be inspected in accordance with the inspection procedures as outlined the facility SPCC Plan. The Plant Manager is responsible for ensuring these inspections are performed as required and all items requiring corrective actions are addressed. Completed inspection forms are to be signed by the inspector and maintained with the official copy of this Plan or the SPCC Plan for at least three years. A copy of the AST inspection form can be found in the Facility SPCC Plan. A copy of the Response Equipment Inspection Form is attached as Form 2.

**SPP/FRP monthly inspections are located in Appendix C**

## 1.7 Plan implementation

### 1.7.1 Response Resources for Small Spills 40 CFR part 112, App. E (3.0)

A small discharge is defined as an amount less than or equal to 2,100 gallons. According to the final rule, the response resources shall, as appropriate, include:

- 1,000 feet of containment boom or two times the length of the largest vessel that regularly conducts oil transfers to or from the facility; and a means of deployment within one hour of the discovery of the spill.
- Oil recovery devices with a daily recovery rate equal to the amount of the oil discharged in a small spill, within two hours of the detection of an oil discharge
- Oil storage capacity of recovered oily material, equivalent to twice the effective daily recovery rate.

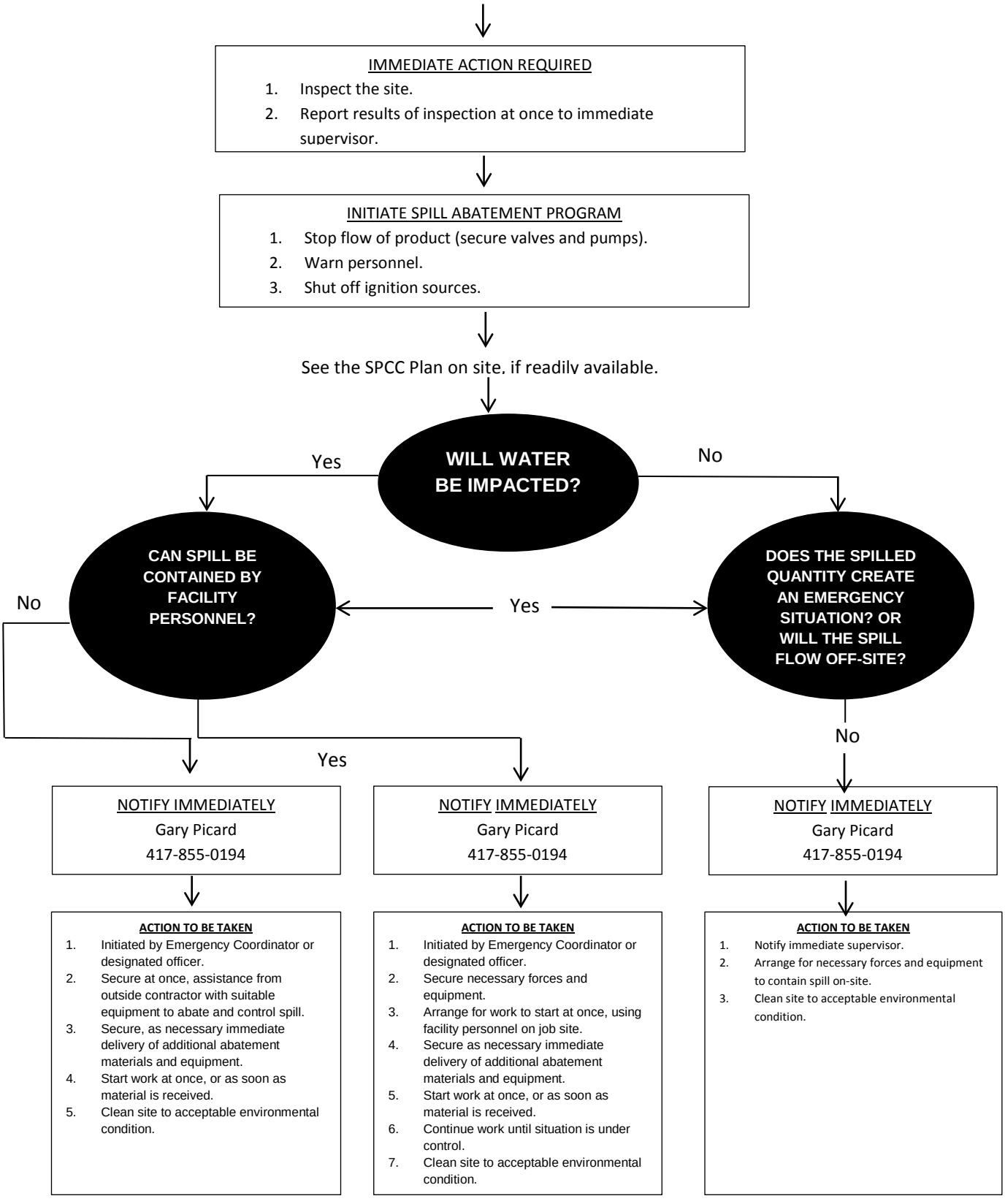
The CFR states that the above resources shall be required *as appropriate.* Due to the facility location near the headwaters of the Eleven Point River, which is an area that typically has little or no flow, the nature of the asphalt product stored onsite, and the smaller quantities of ethanol stored onsite. The facility has determined that the appropriate amount of boom that would be appropriate for small spill response would be 400 feet. This would allow the facility to deploy four, 100 foot sections of boom to the river to capture any possible sheen or product that may be released.

Environmental factors of weather (heat, rain, wind, snow or ice) must be considered in response and clean-up activities.

# COASTAL ENERGY CORPORATION CONTINGENCY PLAN

## (EMERGENCY ACTION) FLOW CHART

**OIL SPILL DETECTED AND REPORTED BY ON-DUTY OFFICER**



Oil recovery devices are determined as follows:

the effective daily rate recovery rate is 2,100 gallons per day.

the effective daily recovery are of the oil recovery devices is calculated as

$$R=(T)(24\text{hours})(E)$$

$$T=\frac{R}{(24\text{ hours})x(E)}$$

$$T=\frac{2100}{(24)\times 0.020}$$

$$T=\frac{437.5\text{ gallons}}{\text{hour}}$$

R= Effective daily recovery rate

T= Throughput rate

E= 20 percent efficiency factor

**Oil storage capacity** must be twice the effective daily recovery rate. For a small spill it is twice 2100 gallons per day, or 4200 gallons per day storage capacity. Response contractors can provide the 55 gallon drums or other tanks that would be used for storage. Containment boom, if required, will be deployed by emergency response contractor.

**Response Resources for Medium Spills**

A medium discharge is defined to be 36,000 gallons or 10% of the largest above ground storage tank whichever is less. 10 % of the largest tank would be 42,000 gallons for asphalt and 3000 gallons for ethanol. Therefore, the response shall be capable of containing 36,000 gallons. Equipment required for a medium spill includes:

- Oil recovery devices with an effective daily recovery rate equal to 50% of the medium spill amount
- Sufficient boom available within the recommended response times
- Storage capacity equivalent to twice the effective daily recovery rate

Environmental factors of weather (heat, rain, wind, snow or ice) must be considered in response and clean-up activities.

Oil recovery devices needed are determined to be:

Recovery Rate Needed = 0.50(36,000gal) = 18,000 gal

$$\text{Throughput rate} = \frac{R}{24 \text{ hrs} \times E}$$

$$= \frac{18{,}000 \text{ gal}}{24 \text{ hrs} \times 0.20}$$

$$= \frac{3{,}750 \text{ gal}}{\text{hr}} \times \frac{\text{hr}}{60 \text{ min}}$$

$$= \frac{62.5 \text{ gal}}{\text{min}}$$

**Sufficient boom** is available within 12 hours as recommended in the final rule. Extra boom is available from the contractors, if required.

**Storage capacity** must be equivalent to twice the daily recovery rate or:

2 x 18,000 gal = 36, 000 gal

**Storage capacity** is available in temporary tanks from the contractors.

Medium spill response equipment

- Boom Boom is available from the response contractor
- Recovery equipment Recovery equipment is available from response contractor
- Storage capacity temporary tanks provided by response contractors

In the event of a medium spill coastal personnel will secure cleanup equipment as required. Cleanup will be performed by the emergency contractor. Response effort will be coordinated by the QI. Given that Coastal and the OSRO contractor is prepared to respond to a 36,000 gallon asphalt spill in this scenario they will also have the capability to respond to 3000 gallon ethanol discharge.

**Response Resources for Worst Case Spills (part 112, Appendix E, section 7.6.1– 7.7.5)**
**The worst case asphalt discharged for this facility is 420,000 gallons and 30,000 gallons for Ethanol**
There may be practical limits on time for (some) resources to arrive on scene. A tiered planning approach is required by regulation. Oil spill response resources must be located such that they are capable of arriving at the scene of the discharge within the time specified for the applicable tier. Response resources required for the first tier of the response effort must be mobilized at the site within 12 hours. Response resources required for the second and third tiers of the response effort must be mobilized at the site within 36 and 60 hours, respectively. Response resources requirements and available equipment are described below.

A Group 5 oil response must be made in 24 hours.

This Plan is for a response of 25 miles of river cleanup in a worst case scenario. Final rule dictates 20 miles as a minimum planning distance. Almost all of the planning distance is on a dry creek bed. Environmental factors of weather (heat, rain, wind, snow or ice) must be considered in response and clean-up activities.

The Eleven Point River is a 303d listed losing stream at this location. The stream bed has very little water at this site, mostly consisting of intermittent pools with a rock and sand river bottom. Downstream the river changes into a clear and relatively shallow Ozark water body that originates near Willow Springs, Missouri. Temperature ranges from 2.0 to 30.5 degrees Celsius. Stream width is a low of 60 feet to a high of 210 feet. The stream is fed through a series of underground springs and is classified as a cold water fishery. Group 5 oils will need (in accordance with 40 CFR Ch. 1 part 112, appendix E sections 7.6.1 to 7.6.3) the following appropriate response resources for dealing with a worst case scenario:

- Considering the terrain, depth of the water body and the characteristics of Asphaltic Oil; a medium to large excavator with sufficient bucket size will be the primary recovery tool used in a worst case discharge. Careful placement along stream bank and access to the dry river channel will allow for sufficient reach to recover the Asphaltic Oil.
- Due to the size and given the fact this is a losing stream at the outfall discharge point off of COASTAL property, sonar equipment will not be needed to locate Asphaltic Oils in the unlikely event of a release.
- Containment and diversion tactics will play a key role in suppression of the material prior to a water body. COASTAL has a skid loader and a 1 yard bucket, a 3000 Ford tractor with a box blade, a Caterpillar skid steer with 1 yard bucket attachment, a Case 621 articulating loader with a 3 yard bucket, a 1988 dump truck and other on-site equipment that can be used to quickly contain or divert/ trench or create a small earth containment structure within the confines of the perimeter dike that exists at this facility. Asphaltic Oil must be heated to create enough viscosity so it can be transported. This works to an advantage for recovering and remediation of the area.
- Inclement weather will hamper a recovery operation. More concern will be placed in the spring with significant rainfall events than winter snow and ice. Since the stream is a losing stream, ice on water will not be a concern; however freezing conditions will solidify Asphaltic Oil more quickly. Those same conditions will require extra attention for exposure to cold weather for onsite workers.
- In case of a fire COASTAL has established a cooperative working relationship with the Willow Springs City/Rural fire department and its fire chief Matt Foster. Also available is

the District 9 Haz Mat team located in West Plains. Mutual aid agreements exist with other communities should the need for expanded services to contain or fight a significant fire event.

Asphaltic Oil will degrade over time and release some top water sheen. Placement of containment booms and pads will be used to address this issue.
Asphaltic Oil will tend to congregate near the bottom of the stream (when there is sufficient flow), as the spill is remediated, OSRO will adapt and use appropriate response resources, such as vacuum trucks, high capacity oil/water pumps and oil water separators to recover and restore the stream and stream bank.

**Oil spill recovery devices** should be able to arrive on site according to the following tiered response:

| | |
|---|---|
| Tier 1 | 12 hours |
| Tier 2 | 36 hours |
| Tier 3 | 60 hours |

The calculated **on-water recovery capacity** (see calculations in appendix D) is:

| | |
|---|---|
| Tier 1 | 9,477 bbls/day |
| Tier 2 | 12,992 bbls/day |
| Tier 3 | 19,488 bbls/day |

**Shoreline cleanup volume** for worst case discharge is estimated at 420,000 gallons (see appendix D). Planning as per rule prescribe a plan for two times tier 3 or 38,996 bbls/day.

Sufficient boom and sorbents are available through contractors to sustain a worst case emergency response effort. COASTAL will retain 1000 feet of containment boom on the facility and be prepared to deploy it within an hour of the discovery of a discharge (Part 112, Appendix E 3.3.1).

A response of this magnitude will have to be staged. Although a spill of this magnitude is highly unlikely, the plan will address an adequate level of response. Initial response will include on site personnel, as described throughout this plan, staff will notify the safety officer who will in turn make an assessment of the incident and then make the notification calls to local, state or federal officials as appropriate.

If rendered safe, the on-site personnel will work to contain the spill. Calls will be made to a Qualified Contractor (Environmental Works, Inc.) to deploy to the site and execute the remediation.

**Temporary Storage Capacity.** In general, storage capacity will be provided by contractors according to the tiered response times listed for the oil spill recovery devices. Empty tank cars may be available on site. The temporary storage capacity will contain twice the effective daily recovery rate or:

| | | |
|---|---|---|
| Tier 1 | 9,744 bbls (409,248 gal) | 12 hours |
| Tier 2 | 12,992 bbls (545,664 gal) | 36 hours |
| Tier 3 | 19,488bbls (818,496 gal) | 60 hours |

Response for worst case discharge is outlined below: (Part 112, Appendix E, 3.1.1)

**Boom**
Additional boom is available through the response contractor.
**Recovery Equipment**

- **Tier 1;** 12 hours; 4,943 bbls/day (207,606 gal)
  Vacuum trucks or excavators are available from contractor
- **Tier 2;** 36 hours; 6,591 bbls/day (276,822 gal)
  Vacuum trucks or excavators are available from contractor
- **Tier 3;** 60 hours; 9887 bbls/day (415,254 gal)
  Vacuum trucks or excavators are available from contractor

**Storage Capacity**

- **Tier 1;** 12 hours; 9,886 bbls/day (415,212 gal)
  Frac tanks are available from contractor
- **Tier 2;** 36 hours; 12,992 bbls/day (553,644 gal)
  Frac tanks are available from contractor
- **Tier 3;** 60 hours; 19,488 bbls/day (830,508 gal)
  Frac tanks are available from contractor

In the event of a worst case discharge, the QI will coordinate response efforts with local, state, federal and contracted resources. COASTAL will initiate a response to contain and control the spill. Contracted emergency responders will perform cleanup operations as outlined in this plan.

### 1.7.2 Disposal Plans

Typical disposal methods of potentially contaminated materials are listed below.
Recovered product is pumped to a slop oil tank or container or shipped offsite for recycling.
Contaminated soil is stockpiled and protected onsite for subsequent landfarming, thermal treatment, or disposal at appropriate facilities.
Contaminated equipment and materials, including drums, tanks, parts, valves and shovels are cleaned as appropriate and residues collected.
Personnel protective equipment is drummed and stored as appropriate for disposal.
Sorbents are drummed and stored as appropriate for disposal.
Spent chemicals are drummed and stored as appropriate for disposal.
Disposal locations for contaminated materials will vary depending on type and alternatives that are available. COASTAL intends to recover, reuse, decontaminate, or dispose of materials after a discharge has taken place at the facility. The appropriate permits required to transport or to dispose of recovered materials according to local, state, and federal regulations will be addressed. Additionally, disposal plans will be prepared in accordance with local, state, and federal regulations, where applicable. The response contractor will assist and coordinate appropriate disposal options.

### 1.7.3 Containment and drainage planning

The following information addresses facility containment and drainage:

- Available volume of containment at the facility – see section 1.4.1
- Route of drainage from storage and transfer areas – above ground pipe; see section 1.6 for description of drainage
- Valves used in drainage system, outfall can be closed in case of a spill
- Containment capacity of booms and other equipment that might be used and their locations - see section 1.3.2

Containment areas (concrete for Ethanol and Fusel AST) are constructed to accumulate rainfall and the contents of the largest storage tanks in case of a leak or spill. An inspection is made of the containment area before drainage of any accumulated rainwater. Contents of the drainage are pumped through a underground pipe and the material is applied onto COASTAL property within the dike area. Drainage of the entire site is kept under responsible supervision. The containment area is inspected routinely.

### 1.8 Self-inspection, training and meeting logs

Training and meeting logs are included in this response plan to aid facility employees in spill prevention awareness and response training. Logs must be kept for facility QI Notification drills, spill management team tabletop exercises, personnel training and spill prevention meetings. These records are maintained at COASTAL headquarters. The facility utilizes an Environmental Management System (EMS) and the records and log may be kept on the EMS in digital format. Record keeping information in this section is required by existing SPCC regulations. Facility drills and exercises are discussed below:

### 1.8.1 Facility Self-inspection

Pursuant to section 112.20 (h)(8) of the file rule, each facility must conduct inspections and include the written procedures and records of inspections in the SPCC Plan. The inspection should include tanks, secondary containment, and response equipment at the facility. Response equipment is maintained and inventoried by the OSRO. The inspection of tanks and secondary containment is required by the response plan.

Facility self-inspection requires two steps:

1) A checklist of items to inspect; and
2) A method of recording the actual inspection and its findings.

The date of each inspection shall be noted. These records must be maintained for five years.

Insert form 3 Annual SPCC/ FRP form here

### 1.8.1.1 and 1.8.1.3 Tank and Secondary Containment

The tank and secondary containment inspection log is presented below as form 2. This form is also provided in the SPCC Plan (for the entire facility with additional information and includes more tanks and storage areas than the FRP covers). Additional blank forms are provided in this plan. Completed inspection forms will be kept behind the completed forms tab at the back of the master copy of this plan or on the EMS.

### 1.8.1.2 Response Equipment Checklist

The contracted OSRO or the Environmental Safety Officer will conduct inspections of the response equipment and maintain a record of those inspections, at COASTAL headquarters in this plan. Using the Emergency Response equipment list provided in section 1.3.2 of this plan, response equipment will be inspected based on the following list:

- Inventory (item and quantity)
- Storage location
- Accessibility (time to access and respond)
- Operational status/condition
- Actual use/testing (last test date and frequency of testing)
- Shelf life (present age, expected replacement date)

Please note any discrepancies between the list and the actual equipment available on Form 8. Blank forms and completed forms are provided behind the respective tabs at the back of the Master Copy of this Plan.

Emergency response contractors are responsible for providing response equipment and maintaining inventory, storage location, operational status, actual use/testing, and shelf life of their response equipment. Partial lists of available contracted response equipment can be found in section 1.3.2. Discrepancies should be brought to the attention of the Spill Contractor who is responsible for maintaining response equipment.

Communication Equipment (including operating frequency and channel and/or cellular phone numbers) are tested on a daily via actual use. Emergency channels will be designated by the Qualified Individual at the time of emergency and during drills.

**Form 5**

**Qualified Individual Notification Log**

| |
|---|
| Date |
| Company |
| Qualified Individual |
| Emergency Scenario |
| |
| |
| |
| |
| Evaluation |
| |
| |
| |
| Changes to be Implemented |
| |
| |
| |
| Timetable for Implementation |
| |
| |

### 1.8.2 Facility drills and exercises

COASTAL has developed a program of facility response drills and exercises in accordance with the National Preparedness for Response Exercise Program (PREP) guidelines. The PREP guidelines describe the principals, scopes, and objectives of internal and external exercises. Internal exercises are conducted wholly within the plan holder's organization and those affiliated with contracted OSRO's. These PREP guidelines specify that the facility conduct the following drills and exercises:

(1) Internal exercises
QI notification drills (quarterly)
Spill management team tabletop exercises (Annually)
Equipment deployment exercises for OSRO (annually)
Annually Unannounced exercises (at least one of the above)

Credit for an area or facility specific exercise will be given to the facility for an actual response to a spill in the area if the plan was used for response to the spill and the objectives of the exercise were met and were properly evaluated, documented, and self-certified.

Response plan core components to be exercised and evaluated in a triennial cycle are listed in this FRP. The Qualified Individual Notification Drill Log and Spill Management Team Tabletop Exercise Log are also listed in this document. Completed logs will be maintained as a part of this plan by COASTAL.

### 1.8.3 Response training

A personnel training log that included a record of all formal response training received by each employee is required by Section 112.20. USCG response training elements for the QI and facility personnel are also included in this document.

Emergency response contractors provide response personnel with the appropriate level of training.

Personnel are properly instructed in the operation and maintenance of equipment to prevent oil discharges. Fuel pumpers are trained in fuel transfer, gauging, and inspection procedures. Supervisors and key employees are trained in handling pollution control. All employees involved in dispensing petroleum products are trained in properly handling procedures.

### 1.8.3.1 Personnel Response Training Logs

**Form 6**
**PERSONNEL TRAINING LOG**

| NAME | RESPONSE TRAINING/DATE AND NUMBER OF HOURS | PREVENTION TRAINING/DATE AND NUMBER OF HOURS |
|---|---|---|
| | | |
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### 1.8.3.2 Discharge Prevention Meeting Logs

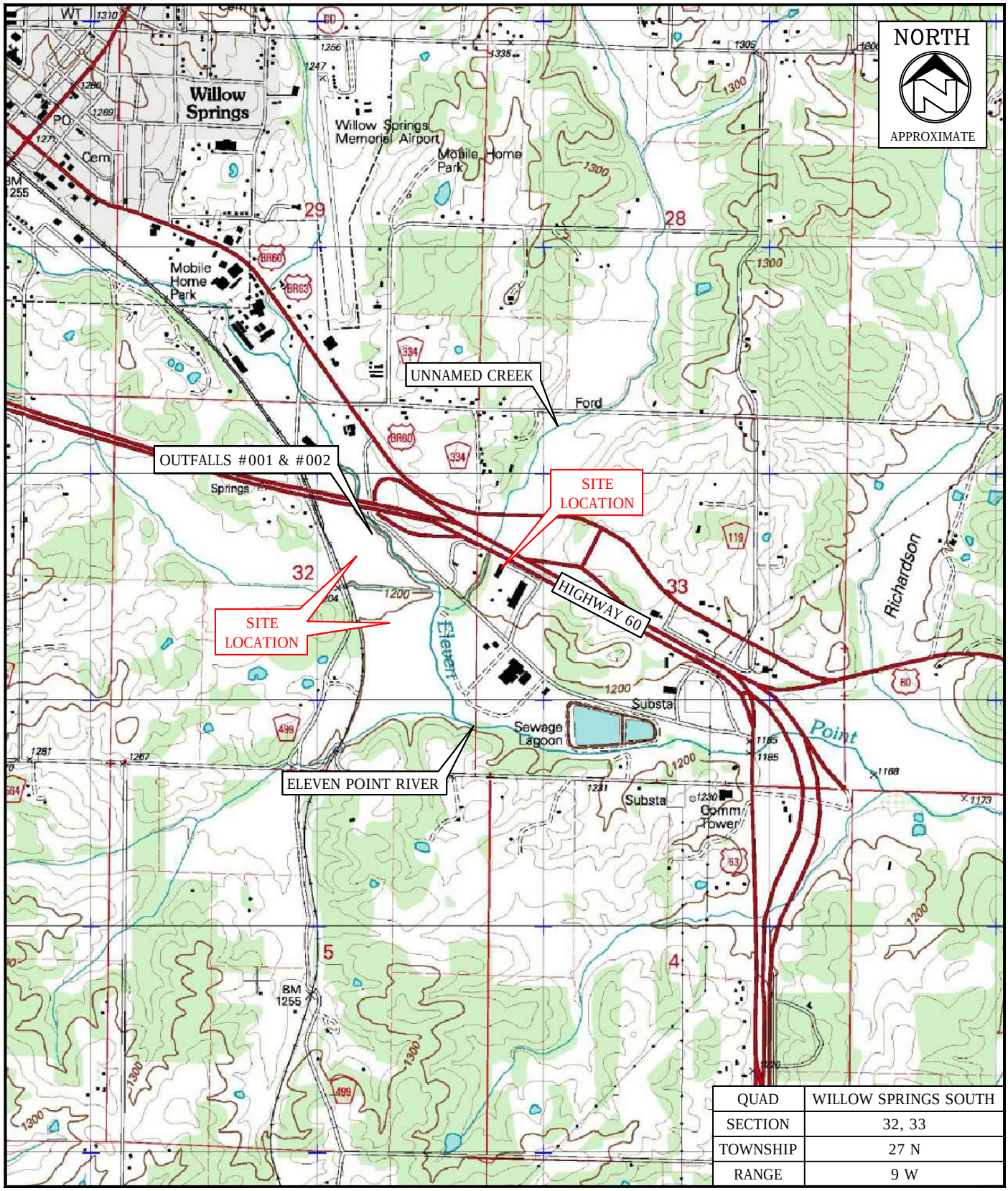
**Form 7**

**Team Tabletop Exercise Log**

| |
|---|
| **Date** |
| **Company** |
| **Qualified Individual** |
| **Emergency Scenario** |
| |
| |
| |
| **Evaluation** |
| |
| |
| **Changes to be Implemented** |
| |
| |
| **Timetable for Implementation** |
| |

## 1.9 Facility diagrams

Figures, 1.0, 2.0 and 3.0




SOURCE: www.mapcard.com (2004)

CHECKED BY: E. AUSTIN

EWI# 140201
DRAWN BY: MEK
Jul. 11, 2014

SCALE (FEET)
0 1000 2000
APPROXIMATE

ENVIRONMENTAL WORKS
1455 E. Chestnut Expressway, Springfield, MO 65802

SITE LOCATION-TOPOGRAPHIC MAP

COASTAL ENERGIES CORPORATION
1 COASTAL DRIVE
WILLOW SPRINGS, HOWELL COUNTY, MISSOURI
PERMIT# MO0136883, SIC# 2951

FIGURE
1.0


NORTH

CHECKED BY:
J. MACY

E.W.I. # 140201
DRAWN BY: MEK
Jul. 11, 2014

SCALE IN FEET
0 50 100
APPROXIMATE

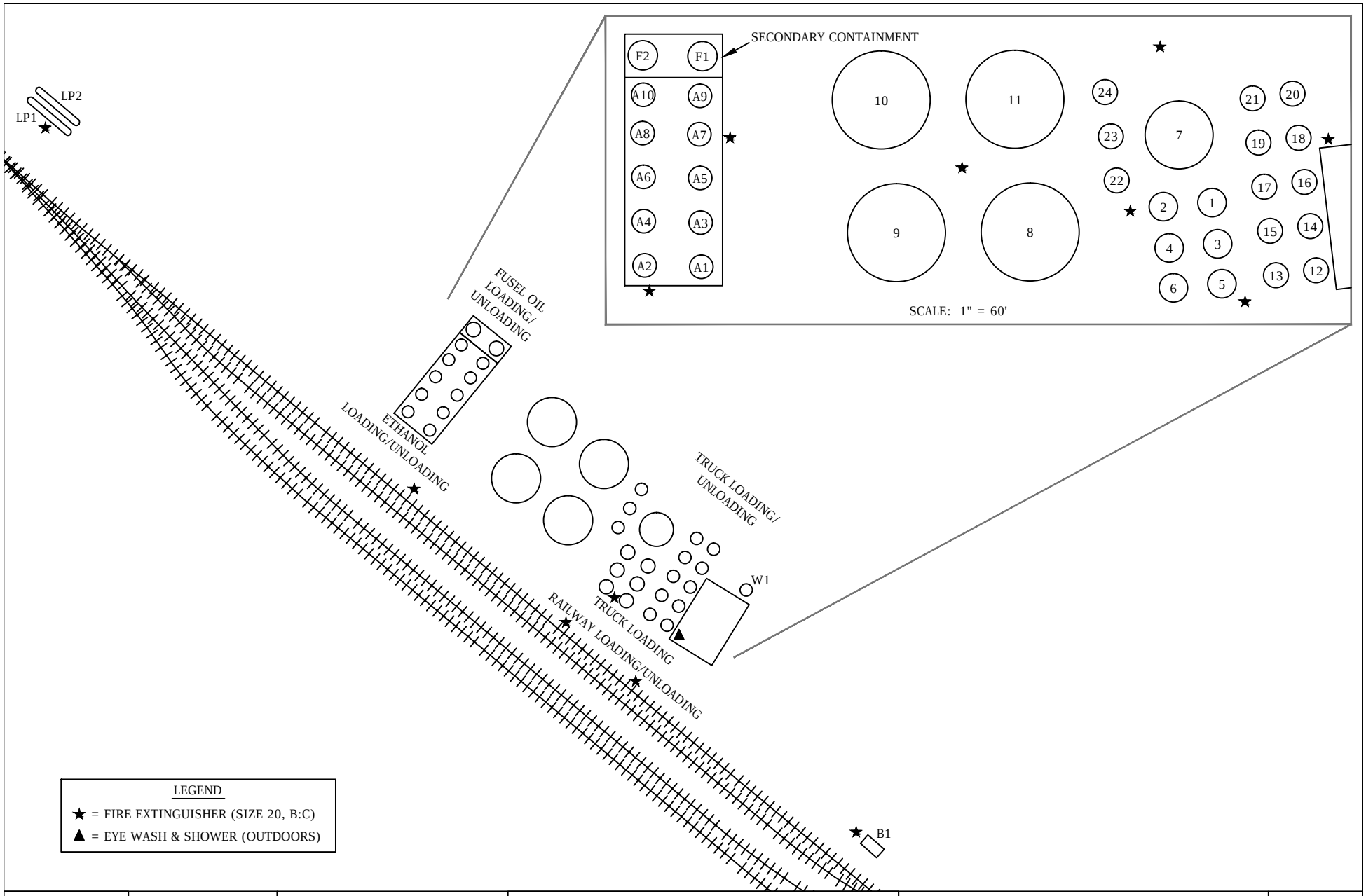
ENVIRONMENTAL WORKS

Springfield Office Location:
1455 E. Chestnut Expressway
Springfield, MO 65802
Phone: (417) 890-9500

# SITE DIAGRAM

COASTAL ENERGIES CORPORATION
1 COASTAL DRIVE
WILLOW SPRINGS, HOWELL COUNTY, MISSOURI
PERMIT# MO0136883, SIC# 2951

FIGURE
2.0




NORTH

CHECKED BY:
B. HENDERSON

E.W.I. # 140344
DRAWN BY: MRB
Nov. 12, 2014

SCALE IN FEET
0 60 120
APPROXIMATE

ENVIRONMENTAL WORKS

Springfield Office Location:
1455 E. Chestnut Expressway
Springfield, MO 65802
Phone: (417) 890-9500

# AST DETAIL DIAGRAM
# LOADING/UNLOADING AREAS

COASTAL ENERGIES CORPORATION
1 COASTAL DRIVE
WILLOW SPRINGS, HOWELL COUNTY, MISSOURI
PERMIT# MO0136883, SIC# 2951

FIGURE
3.1

## 1.10 Security

The SPCC Plan regulations requires that a facility describe in your plan how you secure and control access to the oil handling, processing, and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connection of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism ans assist in the discovery of oil discharges.

The northern portion of the Coastal Energy facility is protected by a gated fence while other access points to the facility are controlled by identification card access and security. Buildings and the general exterior of the facility at the Coastal Energy facility are well lit to help deter acts of vandalism and aid personnel in detecting spills.

The Coastal Energy facility is equipped with the following safety measures and deterrents that can prevent a spill:

- A partial fence along Eleven Point River, from front gate to the highway
- 24 hour lighting
- 24 hour video surveillance
- 24 hour alarm on main buildings and shop

When in non-operating or non-standby service, valves that permit direct outward flow from an oil storage container to the surface are to be kept securely locked in a closed position. This can be accomplished by incorporating any of the following methods:

Additional safety practices should include:

- Adding locks directly to padlock wings of the valve,
- Adding locks to hasps, chains, or comparable hardware to the valve operating stem (or operating handle),
- Closing adjacent valves and adding chains and locks to the operating wheels of these valves in such a manner that attempting to open either valve will cause the adjacent valve to rotate in the “close” direction. This technique will prevent the valve from being opened until the lock is removed.
- Locking a sleeve or cover placed over the valve operates so the valve can’t be opened or closed until the sleeve or cover is removed.
- Starter controls on all pumps are to be locked in the “off” position when they are in non-operating status. Only authorized personnel are to be allowed access to these controls.
- Loading/unloading connections of oil pipelines and facility piping are to be kept securely capped or blank-flanged when not in service or in standby service for an extended period of time. This may be accomplished by installing a valve at the end of a piping connection and enclosing the valve in a lockable box. Said box shall be so designed that the valve cannot be operated until the box is unlocked and opened.

By Rule, this facility is to be protected by deterrents, such as security fencing, that will discourage acts of vandalism. Fencing has been placed partially around the Facility. Additionally, the loading and unloading rack is placed undercover within a lockable garaged structure.

The facility has a security plan, written in accordance with 49 CFR 172. The U.S. Department of Transportation regulations for handlers or transporters of hazardous materials pertain to the facility’s security requirements.

**Appendix A**

**Removed**

**Appendix B**

**Planning Distance**

According to 40 CFR Part 112 Appendix C, a facility owner or operator who must perform a planning distance calculation on navigable water is only required to do so for the type of water applicable to the facility. The planning distance formula for transport on moving waterways contains three variables, the velocity of the navigable water (v), the response time interval (t), and a conversion factor (c).

Planning Distance Formula is $D = vtc$

The response time interval is given in Table 3 of Appendix C from 40 CFR Part 112

TABLE 3—SPECIFIED TIME INTERVALS—Continued

| Operating areas | Substantial harm planning time (hrs) |
|---|---|
| All other rivers and canals, inland, and nearshore areas. | 24 hour arrival+3 hour deployment=27 hours. |

c is a constant 0.68 which is a conversion factor, $0.68\ sec\ \omega\ \frac{mile}{hr\omega} ft\ or\ 3600\frac{sec}{hr} \div 5280\ ft/mile$

Therefore t and c are given but velocity has to be determined $D = vtc\ \ or\ D = v(27)(0.68)$

Per 40 CFR 112, the velocity can be determined by using the Chezy- Manning equation, which models the flood flow rate of water in open channels. The equation has three variables that must be determined by facility owners or operators. Manning's Roughness Coefficient (for flood flow rates), n can be determined from Table 1 below. The stream width near the facility is less than 100 feet. There are trees and/or brush in the stream near the facility and there would certainly be trees and brush during a storm event. Therefore the Manning's roughness coefficient for the Coastal calculations scenario will be $n = 0.10$

TABLE 1—MANNING'S ROUGHNESS COEFFICIENT FOR NATURAL STREAMS

[NOTE: Coefficients are presented for high flow rates at or near flood stage.]

| Stream description | Roughness coefficient (n) |
|---|---|
| Minor Streams (Top Width <100 ft.) | |
| Clean: | |
| Straight | 0.03 |
| Winding | 0.04 |
| Sluggish (Weedy, deep pools): | |
| No trees or brush | 0.06 |
| Trees and/or brush | 0.10 |
| Major Streams (Top Width >100 ft.) | |
| Regular section: | |
| (No boulders/brush) | 0.035 |
| Irregular section: | |
| (Brush) | 0.05 |

The hydraulic radius, r, can be estimated using the average mid-channel depth from charts provided by numerous sources. The average mid-channel depth is then multiplied by 0.667 to obtain r. Due to the nature of the river near the facility and the frequent lack of water, mid-channel depth charts could not be found. Therefore, the Coastal calculations have been based on a number of mid channel depth scenarios. The river is generally dry with small pools of water. Therefore the mid-channel depth values for these scenarios will be 2 feet, 4 feet, and 6 feet.

r = hydraulic radius (average mid channel depth times 0.667)

r = 1.334 at mid-channel depth of 2 feet

r = 2.668 at mid-channel depth of 4 feet

r = 4.002 at mid-channel depth of 6 feet

The average slope of the river was determined by utilizing USGS maps. The elevation of the river was determined near the Coastal facility and the elevation of the river was determined downstream at two different locations, 5 miles and 20 miles. The following formula was utilized to determine slope.

$$elevation\ 1\ -elevation\ 2/miles$$

1200-1140/5 miles or 60/26,400 ft=0.0023

1200-900/20 miles or 300/105,600 ft =0.0028

The Coastal scenario calculations shall be performed utilizing the 0.0028 value which would be considered more accurate due to the longer distance considered.

Utilizing the Chezy-Manning Formula velocity was determined for three separate scenarios.

$$v = \frac{1.5}{n}\ x\ r\text{^}\,{}^{2}/_{3}\ x\ s\text{^}\,{}^{1}/_{2}$$

n = 0.10, from Manning's Roughness Table  s = 0.0028

The first scenario calculation is shown below. Given that the only difference in the formulas for the other scenarios would be the r value the rest of the equations are summed in Table 2 below

$v = \left(\frac{1.5}{0.1}\right) x\ (1.21) x\ (0.047)$ or v = 15 x 1.21 x .047 or v = 0.085

| mid-channel depth | $\frac{n}{} = 1.5/0.10$ | $r^{\frac{2}{3}}$ | $s^{\frac{1}{2}}$ | velocity |
|---|---|---|---|---|
| 2 feet | 15 | 1.21 | 0.047 | 0.85305 |
| 4 feet | 15 | 1.92 | 0.047 | 1.3536 |
| 6 feet | 15 | 2.52 | 0.047 | 1.7766 |

Using the velocities derived from Chezy-Manning equation for the differing scenarios and placing them in the original planning distance formula of $d = vtc$ the planning distances can be determined.

The Table below shows the Distance calculations for the three mid-channel depth scenarios

| mid-channel depth | velocity | time | constant | Distance |
|---|---|---|---|---|
| 2 feet | 0.85305 | 27 | 0.68 | 15.662 |
| 4 feet | 1.3536 | 27 | 0.68 | 24.8521 |
| 6 feet | 1.7766 | 27 | 0.68 | 32.61838 |

In summary, the Chezy-Manning equation was utilized to determine velocities for three scenarios. The velocities were calculated for a mid-channel depth of 2 feet, 4 feet and 6 feet. These values were chosen due to the typical lack of water in the Eleven Point River near the facility. The planning distance for a mid-channel depth of two feet would be approximately 15.66 miles. The planning distance for a mid-channel depth of four feet would be approximately 24.85 miles. The planning distance for a mid-channel depth of 6 feet would be approximately 32.62 miles.

During wet weather conditions the mid-channel depth is rarely, if ever, over 2.5 to 3 feet near the facility. Therefore, a maximum planning distance of 16 to 25 miles would apply only during wet to extremely wet weather conditions.

**Appendix C**

**Recordkeeping forms (Monthly Inspection, Annual Inspections, Discharge Notification, Record of Annual Discharge Prevention Meetings, Agency Annual Discharge Prevention and Training Log, Spill Response Kit Inspection Log, Spill Response Checklist**

Note: Monthly and Annual Tank Inspection Forms are located within the SPCCP

**Discharge Notification Form Agency Notification Standard Report Record of Annual Discharge Prevention Briefings and Training Storage Area Inspection Log Sheet Aboveground Tank Inspection Log Sheet Spill Response Kit Inspection Checklist**

| **DISCHARGE NOTIFICATION FORM**<br>**Part A: Discharge Information** | |
|---|---|
| General information when reporting a spill to outside authorities<br>Name:<br>Address:<br>Telephone:<br>Owner/Operator:<br>Primary Contact:<br>Work: Cell (24 hrs): | |
| Type of oil: | Discharge Date and Time: |
| Quantity released: | Discovery Date and Time: |
| Quantity released to a waterbody: | Discharge Duration: |
| Location/Source: | |
| Actions taken to stop, remove, and mitigate impacts of the discharge: | |
| Affected media: air water soil storm water sewer/POTW dike/berm/oil-water separator other: _____ | |
| Notification person: | Telephone contact: Business: 24-hr: |
| Nature of discharges, environmental/health effects, and damages: Injuries, fatalities or evacuation required? | |

| Part B: Notification Checklist | | |
|---|---|---|
| | Date and time | Name of person receiving call |
| **Discharge in any amount** | | |
| Type of product | Time of notification | Amount in gallons |
| | | |
| | | |
| | | |
| **Discharge in any amount and affecting (or threatening to affect) a waterbody** | | |
| Local Fire Department | | |
| Department of Natural Resources (573) 634-2436 | | |
| National Response Center (800) 424-8802 | | |
| Environmental Works, Inc. (877) 827-9500 | | |

| | |
|---|---|
| **AGENCY NOTIFICATION STANDARD REPORT**<br>**Facility: Coastal Energy Corporation** | |
| **Owner/operator: David Montgomery** | |
| **Name of person filing report:** | |
| **Location:** | |
| **Maximum storage capacity:** | |
| **Daily throughput:** | |
| **Nature of qualifying incident(s**. | |

**Description of facility (attach maps, flow diagrams, and topographical maps**

| Agency Notification Standard Report (cont'd) |
| --- |
| **Cause of the discharge(s), including a failure analysis of the system and subsystems in which the failure occurred:** |
| **Corrective actions and countermeasures taken, including a description of equipment repairs and replacements:** |
| **Additional preventive measures taken or contemplated to minimize possibility of recurrence:** |
| **Other pertinent information:** |

**RECORD OF ANNUAL DISCHARGE PREVENTION BRIEFINGS AND TRAINING (or uploaded to EMS system)**

Briefings will be scheduled and conducted by the Safety Officer or QI for operating personnel at regular intervals to ensure adequate understanding of the SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

| Date | Subjects Covered | Employees in Attendance | Instructor(s) |
|---|---|---|---|
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**STORAGE AREA INSPECTION LOG SHEET**

| | |
|---|---|
| **Location (Building Number or Map Reference Code):** | |
| **Inspected by:** | **Title:** |
| **Signature:** | **Date of Inspection:** |

**Drums**

| | | |
|---|---|---|
| **1. Any evidence of faulty seals or missing plugs?** | **Yes** | **No** |
| **2. Any labels missing?** | **Yes** | **No** |
| **3. Any evidence of corrosion, cracks, or bulges?** | **Yes** | **No** |
| **4. Any drums inadequately secured from tipping or rolling?** | **Yes** | **No** |
| **5. Any evidence of spills or leaks?** | **Yes** | **No** |

| | | |
|---|---|---|
| **6. Any evidence of tank overheating or malfunction?** | **Yes** | **No** |
| **7. Any labels missing?** | **Yes** | **No** |
| **8. Any evidence of tank corrosion, cracks, or bulges?** | **Yes** | **No** |
| **9. Any evidence of oil spills or leaks?** | **Yes** | **No** |

**Indoor Containment Area**

| | |
|---|---|
| **10. Any spills or leaks?** | **Yes No** |
| **11. Excessive debris accumulation?** | **Yes No** |

**For any items above which "Yes" was checked, please comment below.**

**STORAGE AREA INSPECTION LOG SHEET**

| Inspection Item No. from List | Describe Condition | Describe Corrective Action Needed | Person Responsible for Correction Action | Date Responsible Person Notified | Date Corrective Action Completed |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**SPILL RESPONSE KIT INSPECTION CHECKLIST**

| | |
|---|---|
| **Location (Building Number or Map Reference Code):** | |
| **Inspected by:** | **Title:** |
| **Signature:** | **Date of Inspection:** |

| | | |
|---|---|---|
| **1. Is the spill kit label missing?** | **Yes** | **No** |
| **2. Is the spill kit hard to find?** | **Yes** | **No** |
| **3. Is the spill kit missing?** **Yes No**<br><br>**Gloves?**<br>**Goggles?**<br>**Absorbent material?** | | |
| **4. Is the spill kit open?** | **Yes** | **No** |

| Item | expected quantity | on hand |
|---|---|---|
| Boom | | |
| Absorbent pads | | |
| oil dry bags | | |
| roll sorbent | | |
| plug kit | | |
| shovels | | |
| rakes | | |
| nitrile gloves | | |
| leather gloves | | |

For any items above which “Yes” was checked, please comment:

**SPILL RESPONSE KIT INSPECTION LOG**

| Equipment Description | Describe Discrepancy Between Equipment List and Actual Equipment at this Location | Describe Corrective Action Needed (Specify Replacement Date if Shelf Life will be exceeded by next Inspection Date) | Person Responsible for Correction Action | Date Responsible Person Notified | Date Corrective Action Completed |
|---|---|---|---|---|---|
| | | | | | |
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# APPENDIX D
# PLANNING VOLUME WORKSHEET

## I. Background Information

A. Worst Case Discharge (barrels)

420,000 $gal \times \frac{barrel}{42\ gal} =$ 10,000 bbls

B. Oil Group Group 5

Asphaltic oil and chip and seal combined polymers are all Group 5 persistant oils. These oils are highly persistant with a reletative persistance ranking of 1,600 or extremely persistant. These oils have a specific gravity equal or grater than 1.0. Planning distance meet for USEPA and Coast Guard requirements is 15 miles from the facility for persistant oils.

C. Geographic Area

Choose 1: Nearshore/Inland Great Lakes

Rivers and Canals

D. Percentages of Oil (Table 2)

The facility has 2,472,000 of Asphaltic Oil in various blends that are catagorized as a Group V Persistant Oil. The material has a specific gravety over 1.0 and is further defined as follows:

- very low volatility
- little if any evaporation
- very high viscosity
- very low acute toxicity
- can form stable emulsions
- little if any penetration of substrata

Specific response resources will be employed to recover the Group V Oil, then remediate the site.

*Planning the total volume for worst case scenario includes 420,000 gallons which is the largest storage tanks within secondary containment.

**Appendix E**

**Boom placement diagrams**

Fig. 1

## BOOM PLACEMENT IN RUNNING WATER

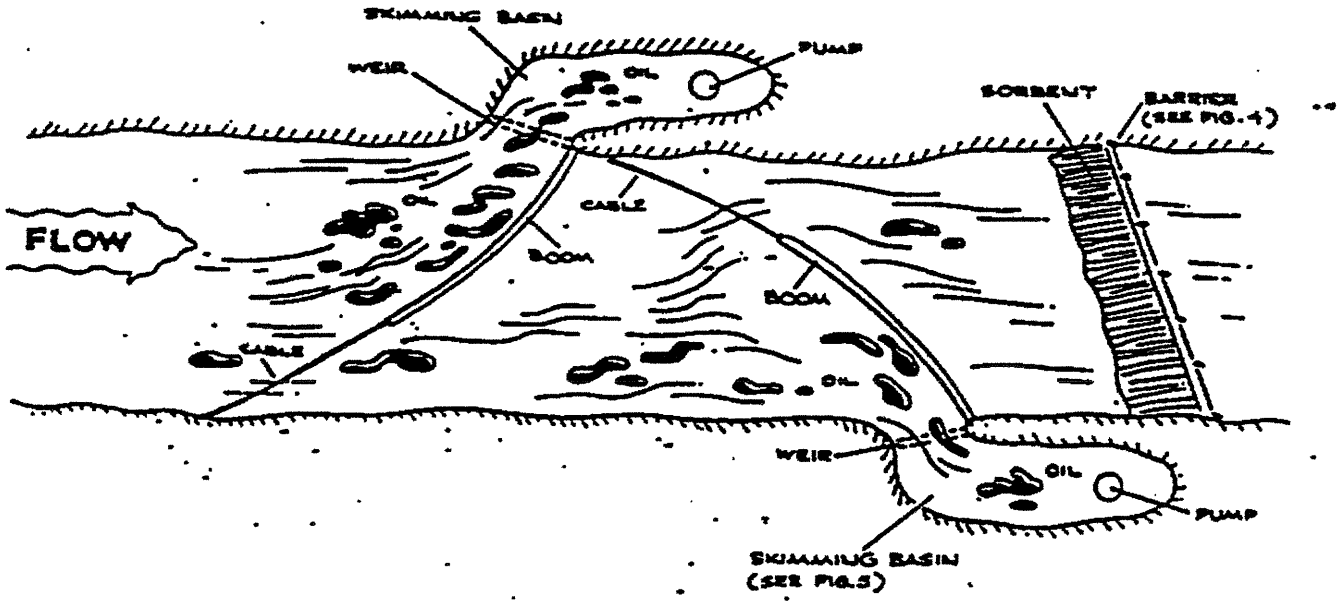
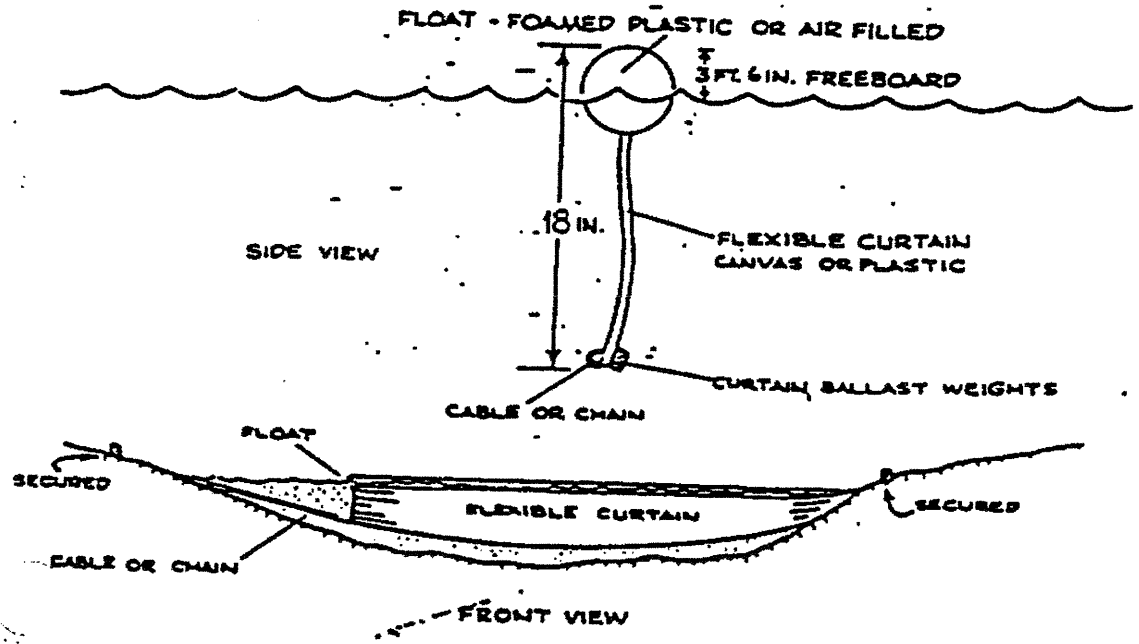


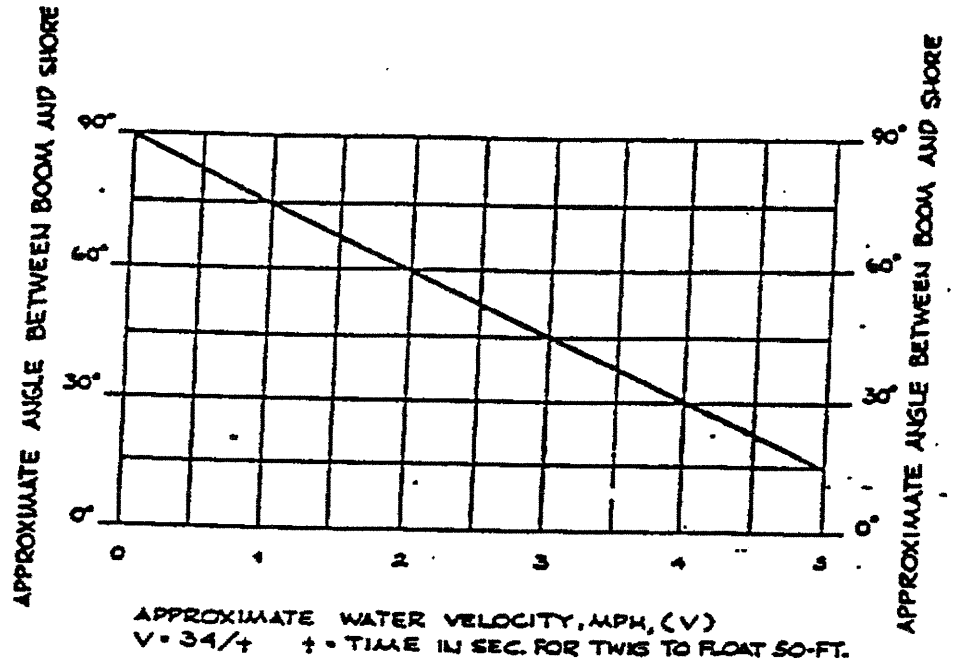

Fig. 2

## CURTAIN BOOM



## BOOM PLACEMENT ANGLES

Fig. 3




## SORBENT BARRIER

Fig. 4

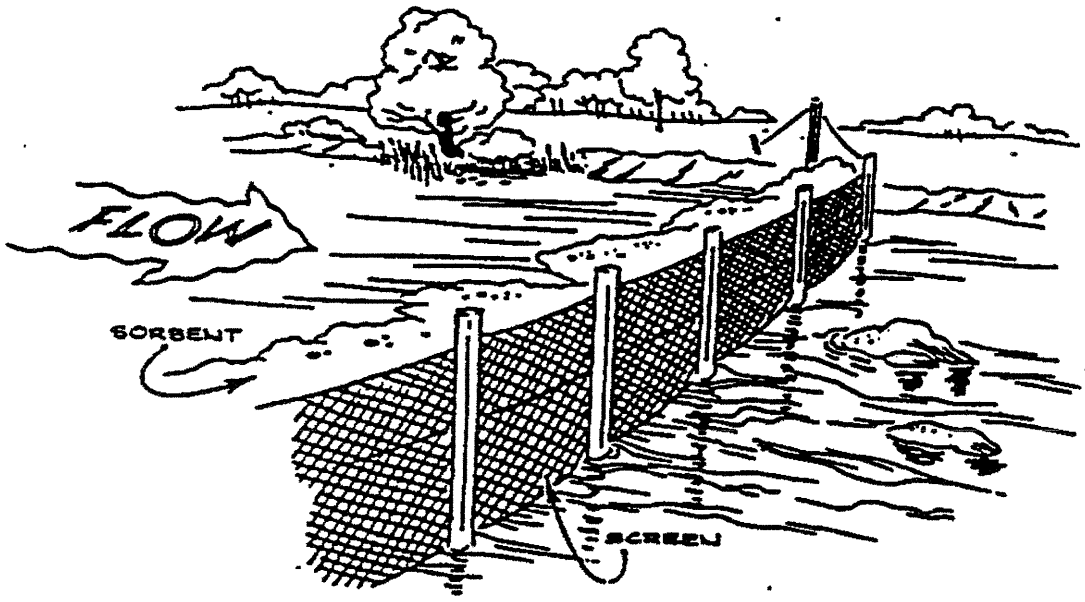


Fig. 7

## FLOATING PUMP OR SKIMMER

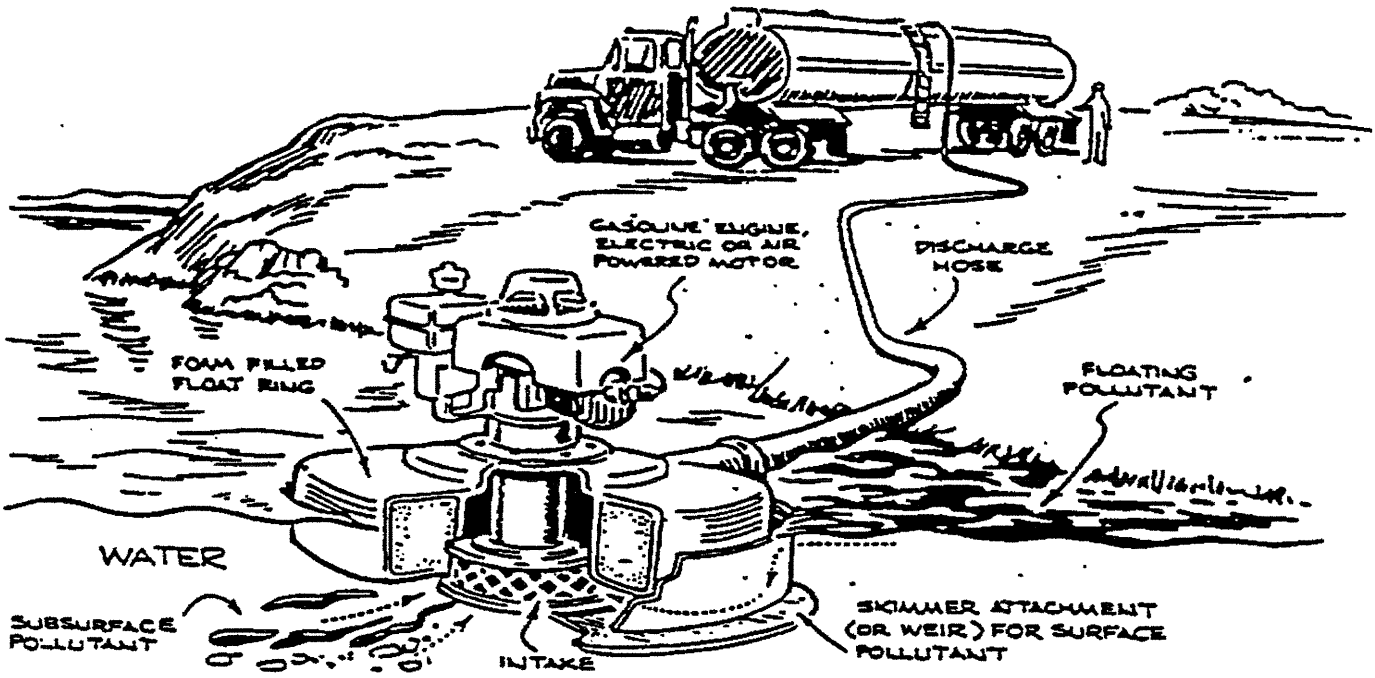



Fig. 8

## CONTAINMENT DAM

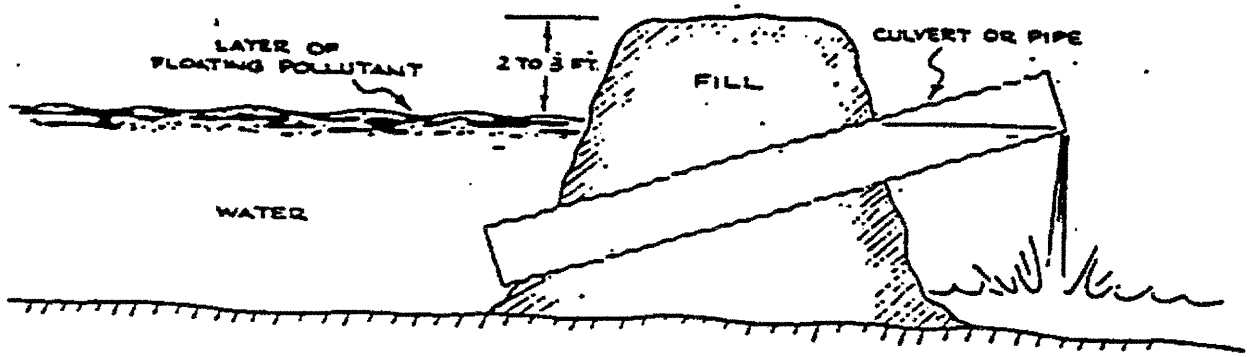
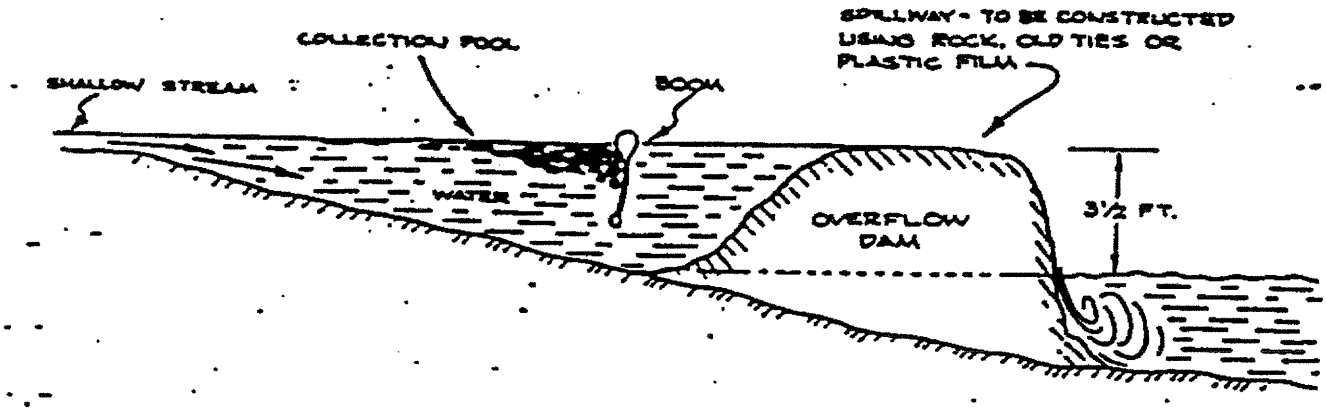
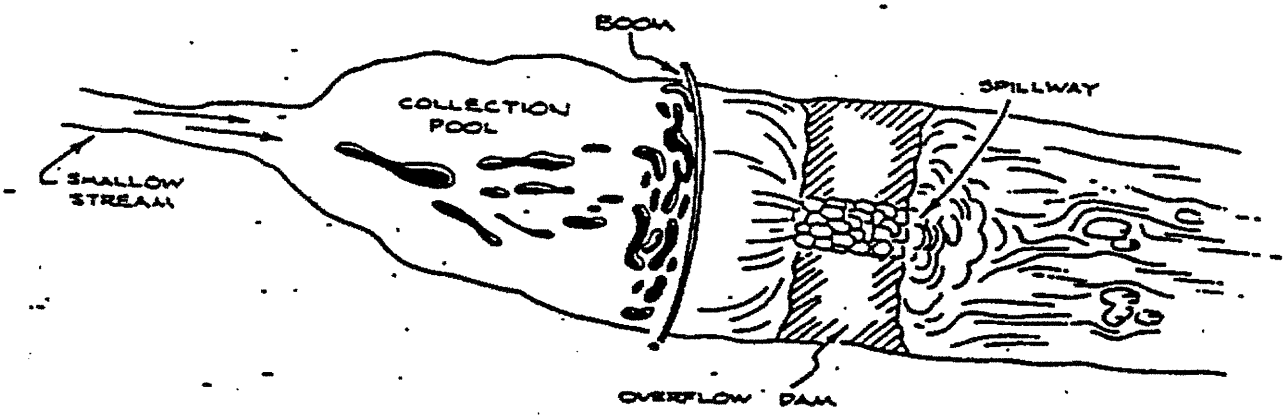


Fig. 9

# OVERFLOW DAM FOR SHALLOW STREAM




SIDE VIEW




OVERHEAD VIEW

**Appendix F**

**Emergency Response Plan (stand alone document)**

**COASTAL ENERGY CORPORATION**

# EMERGENCY RESPONSE ACTION PLAN (ERAP)

Stand-alone document 112.20(h)(1)

**6/27/2014**

**EMERGENCY RESPONSE ACTION PLAN (ERAP) Stand-alone document 112.20(h)(1)**

The Emergency response plan is bound separately and placed in the front of the binder for easy access during an emergency or spill. It contains as much information as necessary to respond to an emergency or spill and is arranged so response actions are not delayed.

The Emergency Response Plan contains:

- Qualified Individual Information
- Emergency Notification Phone List
- Spill Response Notification Form
- Response Equipment List and Location
- Response Equipment Testing and Deployment
- Facility Response Team Information
- Evacuation Plan
- Facility Diagrams

| | **RESPONSE PLAN COVER SHEET** |
|---|---|
| **FACILITY NAME** | **COASTAL ENERGY CORPORATION** |
| **LOCATION** | 234 BURNHAM ROAD |
| **CITY** | WILLOW SPRINGS |
| **COUNTY** | HOWELL |
| **STATE** | MISSOURI |
| **LATITUDE** | 36 deg 58’ 31” N |
| **LONGITUDE** | 91 deg 57” 7” W |
| **Phone** | 417 469 2777 |
| **PLANT MANAGER** | Scott Altermatt |
| **SIC CODE** | 1422 |
| **LARGEST TANK IN SERVICE** | 420,000 gallons |
| **MAXIMUM OIL STORAGE CAPACITY** | 2,812,000 gallons |
| **WORST CASE OIL DISCHARGE** | 2,502,000 gallons, 420,000 single largest tank |
| **DISTANCE TO NAVIGABLE WATER** | 200 feet |
| **NUMBER OF STORAGE TANKS** | 38 |

| CONTACT LIST | RESPONSIBLE ROLE | PHONE NUMBER |
|---|---|---|
| CONTACTS | | |
| Primary contact<br>Gary Picard Safety Officer<br><br>Secondary contact<br>Scott Altermatt<br>David Montgomery | <br>Notification to agencies; Emergency Response initiation<br><br>Notification to agencies; Emergency Response initiation | (417) 469-2777 Office<br>(417) 469 3312 Home<br>(417) 855-0194 Cell<br><br>(417 ) 252 1060 cell<br>(417) 252 1050 cell |
| GOVERNMENTAL CONTACTS | | |
| National Response Center | Incident reporting (if required) | 1 (800) 424-8802 |
| Federal On-Scene Coordinator<br>(EPA Region VII) | Incident reporting; Spill response assistance | (913) 281-0991 or<br>(913) 551-7000 |
| State Emergency Response Commission<br>(SERC) | Incident reporting | 1 (800) 780-1014 |
| Missouri Department of Natural Resources | Incident reporting; Spill response assistance | (573) 634-2436 |
| Fire Department / Police Department | Traffic and crowd control; Evacuation | 911 |
| EMERGENCY RESPONSE CONTRACTORS: | | |
| Haz-Mat One | OSRO Contractor | (800)229-5252 |
| Environmental Works, Inc. | Spill response and clean up resources | (417) 890-9500 (office)<br>(877) 827-9500 (24-hour) |
| OTHER CONTACTS | | |
| National Weather Service (St. Louis, MO) | Weather reports | (636) 441-8467 |
| KUKU 100.3<br>1450 NEWS RADIO KWPM<br>KSPQ 93.9 | Public information | (888) 581-4487<br>(417 256 1025<br>(417) 256 1025<br>(417) 256 3131 |
| Missouri One-Call | Utility location | 1(800) 344-7483 |
| **Texas County Memorial Hospital**<br>716 Main St. Cabool, MO<br>**Mercy St Francis Hospital**<br>100 W highway 60, Mountain View , MO<br>**Ozarks Medical Center**<br>1100 Kentucky Ave, West Plains, MO | Medical assistance | (417) 962-5303<br><br>(417) 934-7000<br><br>(417) 256-9111 |

| CONTACT LIST | RESPONSIBLE ROLE | PHONE NUMBER |
|---|---|---|
| CONTACTS | | |
| Primary contact<br>Gary Picard Safety Officer<br>Secondary contact<br>Scott Altermatt<br>David Montgomery | **CAN RESPOND WITHIN 5 MINUTES**<br>Notification of response agencies; spill reporting<br><br>**CAN RESPOND IN 5 MINUTES**<br>Notification of response agencies; spill reporting<br>reporting | (417) 469-2777 Office<br>(417) 469 3312 Home<br>(417) 855-0194 Cell<br><br><br>(417) 469-2777 Office<br>(417 ) 252 1060<br>(417) 252 1050 |
| GOVERNMENTAL CONTACTS | | |
| National Response Center | Incident reporting (if required) | 1 (800) 424-8802 |
| Federal On-Scene Coordinator (EPA Region VII) | Incident reporting; Spill response assistance<br>**3 hour response time** | (913) 281-0991 or<br>(913) 551-7000 |
| State Emergency Response Commission (SERC) | Incident reporting<br>**3 hour response time** | 1 (800) 780-1014 |
| Missouri Department of Natural Resources | Incident reporting; Spill response assistance<br>**1hr 32 minutes response time** | (573) 634-2436 |
| Fire Department / Police Department | Traffic and crowd control; Evacuation assistance<br>**5 minute response time** | 911 |
| EMERGENCY RESPONSE CONTRACTORS: Spill response and clean up resources | | |
| Haz-Mat One<br>Environmental Works, Inc. | **4 hour response time**<br>**1hr 32 minutes response time** | (800)229-5252<br><br>(417) 890-9500 (office)<br>(877) 827-9500 (24-hour) |

OTHER CONTACTS

**THIS LISTING WILL REMAIN POSTED BY ALL TELEPHONES AND BE FREQUENTLY UPDATED**

## MEASURES TO SECURE SOURCE OF DISCHARGE

COASTAL will allocate all listed equipment in the Facility Response Plan to secure all sources of discharges. As previously discussed COASTAL will employ a safety first model in making attempts to secure a substantial leak from a vessel. If necessary, COASTAL will call in their contractor (Environmental Works, Inc.) to assist with this repair. (877) 827-9500 (24-hour)

Routinely COASTAL has the necessary equipment on sight to stop most pipe splits or cap pipes or hoses temporarily to eliminate a leak.

### 3.3 Emergency Equipment List and Location

Coastal will rely on OSRO and other emergency contractors to respond to a spill. Coastal does maintain response equipment inventory sufficient to only address smaller spills. Table 3 identifies the type and location of the emergency response equipment, including personal protective equipment available at the facility. These materials should be routinely inventoried and inspected. They should also be replenished or replaced as needed.

Table 3

| **COASTAL EMERGENCY EQUIPMENT** | **All material is in emergency trailer, equipment is staged by warehouse** |
|---|---|
| 9-SAFETY CONES | 5-BAGS GRANULAR ABSORBENT |
| 1 –AXE | 10-BAGS SPHAG SORB |
| 2-HEAVY ROCK RAKE | 50-18”X18” WHITE OIL ONLY SORBENT PILLOWS |
| 4-SHOVELS | 14-18”X8” WHITE OIL ONLY SORBENT PILLOWS |
| 1-BROOM | 200-17”X19” WHITE OIL ONLY SROBENT PADS |
| 5-HARD HATS | 1-38”X144’ WHITE OIL ONLY SORBENT ROLL |
| 5-FACE SHIELDS | 32-2”X4’ WHITE OIL ONLY SOCKS |
| 5-SAFETY GLASSES | 7-2”X8’ WHITE OIL ONLY SOCKS |
| 1-TYVEK SUIT | 3-4”X8’ WHITE OIL ONLY BOOMS |
| 4-MULTI PURPOSE COVERALLS | 8-8”X10’ WHITE OIL ONLY BOOMS |
| 3-TYPE 270 OIL ABSORBENT BOOMS | Caterpillar TC-30 Forklift Hard Surface Only 2500lb capacity |
| Lull 944 E 42’ boom fork attachment | 3000 Ford Tractor with 5’ Box Blade |
| Case 621 B articulating rubber tire loader 3 yd. bucket | 225 Caterpillar skid steer with 1yrd bucket attachment and forklift attachment. |
| 1988 Ford Dump Truck | Caterpillar TC-30 Forklift Hard Surface Only 2500lb capacity |
| 1991 Toyota Pickup | JLG Man Lift 80HX 500lb capacity |
| 1 Service Truck with 3” product pump | 3000 Ford Tractor with 5’ Box Blade |
| 1 3” Gas Powered Trash pump | 225 Caterpillar skid steer with 1yrd bucket attachment and forklift attachment. |

**SPILL NOTIFICATION FORM**

### 3.1 Emergency Spill Notification Form - Form-1

| **FORM 1 - SPILL NOTIFICATION INFORMATION FORM** | | | |
|---|---|---|---|
| **Reporter's Last Name:** | **First:** | **Middle Initial:** | **Reporter's Company Position:** |
| **Phone Number(s) :** | | | |
| **Facility Name:**<br><br>**COASTAL ENERGY CORPORATION** | **Owners Name:**<br><br>**DAVID MONTGOMERY- President** | | **Organization Type :**<br><br>**SIC CODE 1422** |
| **234 Burnham Road, Willow Springs** | | | **State: MISSOURI Zip: 65793** |
| **Were Materials Released: (Y/N)** | | **Confidential : (Y/N)** | |
| **Meeting Federal Obligations to Report (Y/N)** | | **Date Called:** | |
| **Calling for Responsible Party: (Y/N)** | | **Time Called:** | |
| **Incident Description** | | | |
| **Source and/or Cause of Incident:** | | | |
| **Date:** | | **Time of Incident:** | |
| **Incident Address/Location :** | | | |
| **Container Types: ethanol, asphaltic oil, fuel oil, polymer Tank Capacity : Units: gallons** | | | |
| **Facility Capacity : 2,812,000 Units: gallons** | | | |
| **Facility Latitude: 36 degrees 58' 31" N** | | | |
| **Facility Longitude : 91 degrees 57' 7" W** | | | |

List of Employees and Duties:

Gary Picard - Safety officer and Qualified Individual (QI). Plans for and conducts training, addresses spill response activities at the plant and coordinates response for actual spill. Gary will be the final decision maker on evacuation of the facility in a worst case scenario and on spill clean-up of any size.

In the event Gary is unavailable

Scott Altermatt - will be secondary QI Scott is the facility manager and head of maintenance.
David Montgomery - will be the QI if both Gary and Scott are not available. David is the president of the company.

Garry Barton- plt manager, responsible for plant operations, scheduling other employees, unloading rail cars, trucks, pulling samples for testing, truck loading, plt maintenance, etc.

Staff

Gary Roberts- plant maintenance, hooking up rail cars for heating, unloading cars and trucks, loading trucks, making sure shipping papers are in order, etc.

Marty Makowlski- responsible for proper blending of PMA asphalt, operation of skid system, operation of blower system, lab testing, boiler operation and maintenance, assists with unloading of rail cars and trucks, and loading of trucks for outbound shipments.

Ray Brotherton- assists Marty with blending, lab testing, boiler operation and also unloads rail cars, trucks and truck loading of out bound shipments. Also, assists with general plant maintenance and operation.

COASTAL plans to purchase adequate spill containers to address medium spills. Four 55gallon steel drums will be stored with emergency response equipment to address small and medium spills

Storage tanks are currently only numbered. Tanks will be affixed with appropriate hazard class signs.

There are two rally points on the topographic map that is attached. Also there is one fire hydrant on property and another on Burnham Rd. All locations of all Fire Extinguishers and emergency Eyewash stations and shower are listed on the map.

**OIL SPILL CONTINGENCY PLAN**
**General Procedures in the Event of a Spill**

- Safety First: assess the scene to determine safety hazards, the source or cause of the spill and the nature and volume of the spill.
- Immediately stop work and notify all personnel in the vicinity. Immediately notify supervisors of any chemical, fuel or oil spill. Turn off engines, ensure there are no sources of ignition within the spill area and ventilate as much as possible.
- Appropriate personal protective equipment including respirators to contain and recover spills. Implement measures to stop the leak or source of the spill and begin to contain the spill provided it is safe to do so. Dike area to contain the spill, prevent spill from reaching a watercourse, drain or exposed soil. Use proper spill recovery supplies to contain and recover the spilled material. Allow gasoline to evaporate, to minimize risk of potential ignition.
- Supervisors are to immediately report any spills of fuel or oil of 55 gallons or more by calling the DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL EMERGENCY RESPONSE at 1-573 634 2436.
- Treat contaminated spill recovery supplies as hazardous wastes and handle and dispose of these accordingly.
- Re-stock spill recovery supplies to replace those that have been used.
- After containment and recovery have been competed the Supervisor is to ensure that a Spill Report Form is submitted to the EMS database.

*Note* – if more than 50 gallons of Ethanol has been spilled do not attempt to clean up the material. Evacuate personnel to a location upwind and notify vehicle and other equipment operators of the spill to avoid ignition of the gasoline. Contact the fire department immediately. Attempt to divert or otherwise prevent gasoline from entering storm drains and ditches, or from entering watercourses or exposed soils. Ensure that those managing the spill approach from upwind, wearing appropriate protective gear including respirators equipped with organic vapor cartridges.

**SMALL SPILLS**

SPILLS OF 2,100 GALLONS OR LESS

The Safety Officer and Qualified Individual (Gary Picard) will lead on site personnel. Gary and his staff will address small spills resulting from hose leaks, dripping seals, or other factors causing a release of 2,100 or less dependent on the material released.
For heavy oil products, diesel and polymer spills, the on site staff will remediate using absorbent pads and loose material, removing the material to an approved storage vessel and disposing the material as required by regulation.

In the case of a highly flammable release (Ethanol) the following precautions apply:

Ethanol is colorless and highly flammable

Eliminate all ingnition sources , flames and sparks
Area must be well ventilated
Equipment used in handling the product must be grounded
Do not touch or walk through spilled material
Stop leaks only if you can do it without risk
A vapor suppressing alcohol resistant foam may be used
Alcohol breaks down in the film of regular foam
Absorb or cover with dry earth, sand or other noncombustible material
**Evacuate the facility as necessary to predetermined rendezvous points**

**MEDIUM SIZED DISCHARGES**

SPILLS BETWEEN 2,100 AND 36,000 GALLONS

On site personnel work to contain medium sized spills using equipment resources at the facility to trench and make temporary earthen dikes. Absorbent material will be applied as necessary to contain the material. A Qualified Emergency Contractor (Environmental Works, Inc.) will be activated to respond and remediate the spill. Material will be placed in approved roll-off vessels and twill be treated as a Hazardous Waste until final disposal options are selected.

Deploy Qualified Contractor (Environmental Works, Inc.) and on site individuals to remediate the contamination. Material will be contained using booms or pads and disposed of in approved containers under the direction of the safety officer.

In the case of a highly flammable release (Ethanol) the following precautions apply:

Ethanol is colorless and highly flammable
Eliminate all ignition sources, flames and sparks
Area must be well ventilated
Equipment used in handling the product must be grounded
Do not touch or walk through spilled material
Stop leaks only if you can do it without risk
A vapor suppressing alcohol resistant foam may be used
Alcohol breaks down in the film of regular foam
Absorb or cover with dry earth, sand or other noncombustible material
**Evacuate the facility as necessary to predetermined rendezvous points**

**LARGE SPILLS**

GREATER THAN 36,000 TO 420,000 GALLONS

**I**nitial response will include on site personnel. As described throughout this plan, staff will notify the safety officer who will in turn make an assessment of the incident and then make the notification calls to local, state or federal officials as appropriate.

If rendered safe, the on-site personnel will work to contain the spill. Calls will be made to a Qualified Contractor (Environmental Works, Inc.) to deploy to the site and execute the remediation.

If necessary the facility will be evacuated and staff will be directed to predetermined rally points dependent on existing environmental factors, such as weather and wind conditions.

In the case of a highly flammable release (Ethanol) the following precautions apply:

Ethanol is colorless and highly flammable
Eliminate all ignition sources, flames and sparks
Area must be well ventilated
Equipment used in handling the product must be grounded
Do not touch or walk through spilled material
Stop leaks only if you can do it without risk
A vapor suppressing alcohol resistant foam may be used
Alcohol breaks down in the film of regular foam
Absorb or cover with dry earth, sand or other noncombustible material
**Evacuate the facility as necessary to predetermined rendezvous points**

**FACILITY RESPONSE SCENARIO**

The most probable discharge will be less than 20 gallons from overtopping a tank or a hose or line failure. The most dangerous of the smaller spills at this facility will be Ethanol spills.

Discharges of more than 1000 gallons will require the support of outside contractors (this includes medium discharge scenario), for control, recovery and remediation efforts. Following notification, COASTAL officials will focus efforts on inhibiting the flow of spilled oil to conduits, containing the release and minimizing the impacts of the spill.

In the case of a highly flammable release (Ethanol) the following precautions apply:

Ethanol is colorless and highly flammable
Eliminate all ignition sources, flames and sparks
Area must be well ventilated
Equipment used in handling the product must be grounded
Do not touch or walk through spilled material
Stop leaks only if you can do it without risk
A vapor suppressing alcohol resistant foam may be used
Alcohol breaks down in the film of regular foam
Absorb or cover with dry earth, sand or other noncombustible material
Evacuate the facility as necessary to predetermined rendezvous points

Larger releases will involve the activation of local emergency response personnel initially, then deploy a Qualified Contractor (Environmental Works, Inc.) for site remediation and recovery efforts. Control valves will be turned to the closed position or secured otherwise, seals and plugs will be used as necessary. All ignition sources will be secured to prevent a fire.

**RESPONSE EFFORT FACTORS**

The topography of this site and the construction of the basin, simply will not allow any material off site. In a highly unlikely catastrophic event, the material will flow following topography of the site in an Eastward direction and rest along the side of the dike/levee system.

No impacts are foreseen to potable water supplies or to the Eleven Point River system.

## 3.6 Evacuation Plan

**General Evacuation Instructions**

1. **Do not rush the evacuation, but depart the area are building in an orderly and safe manner.**
2. **Evacuate to your designated location and report to your safety officer.**
3. **In most instances you will be with someone, as a part of a team. Ensure that person or persons that you're working with arrive at the designated location. Know if someone is missing by doing a personnel call.**
4. **Do not attempt to get your personal vehicle unless it is safe to do so and you have permission of the safety officer.**
5. **Always evacuate to an area upwind of the release.**
6. **Stay at your designated location until you have received further instructions or are released from duty.**
7. **Safety officer will make a list of evacuees, Transportation of injured personnel to the nearest medical emergency facility will be conducted by ambulance or professional medical services.**

Based on the analysis of this facility, a local emergency plan has been developed to the help that includes response activity and evacuation plans for most time emergencies. This plan is available on site with the QI. Personnel safety should be considered at all times during the spill response. Evacuation routes and evacuation regrouping areas are shown on figure 2.

In case of an evacuation all employees will be notified by alarm and through radios (by safety officer or his designee) and will receive instructions as to the selection of a predetermined rendezvous location. Employees will exit in an orderly fashion. The safety officer will make certain all employees are accounted for and await further instruction from first responders. After an all clear, employees will receive further instruction.

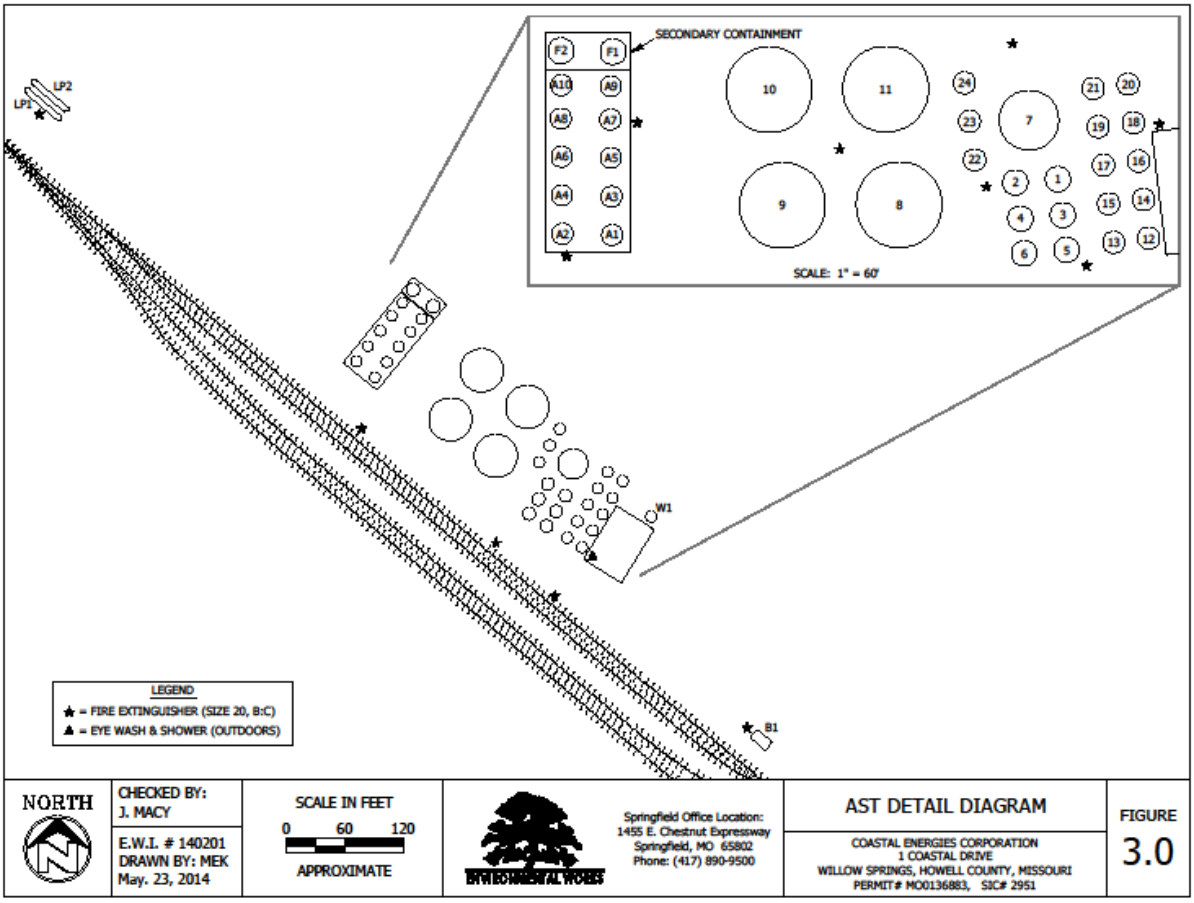
Notable safety issues will be crossing the active rail line to established rally point 1 and rally point 2. The proximity of Ethanol tanks in case of a fire or explosion and the location of the oil storage tanks make the designated rally points attractive to allow for ingress/egress of response vehicles and provide a safe distance to ensure employee safety.

During evacuation consideration should be given to the following factors:

- Location of stored materials 30,000 gallon Ethanol tanks and 420,000 Asphaltic Oil tanks are very close to the facility operations building. Locations are shown in figure 2.

- Hazards imposed by spilled material - Ethanol is highly combustible. All tanks of various oils and materials should be considered in the event of an evacuation.
- Flow direction of the spill the flow direction of the material released will dictate evacuation paths. Generally speaking the topography of the site ensures the flow will be down gradient to the levee and contained alone the levee system to the secured outfall.
- Prevailing wind direction and speed - wind direction and speed should also be taken in consideration during the evacuation.
- Arrival route of emergency response equipment and personnel. There is only one ingress and egress to the facility along Burnham road. This is the reason for the evacuation routes chosen in figure 2, to stay out of the way of incoming emergency equipment.
- Evacuation route - The decision to evacuate will be made by the Safety Officer and QI. Predetermined route paths will be taken given local environmental factors and the type of emergency.

AST detail



Evacuation map

**Appendix G**

**QI Training**

# Section 3: Training for Qualified Individuals

Industry response plan holders must identify a qualified individual who will act as the point of contact between the federal government and the owner or Operator of the vessel or facility. This individual is also referred to as the emergency response coordinator by EPA regulations. The responsibilities of the qualified individual go far beyond that of a mere intermediary. As defined in OPA, the qualified individual is that person identified in a response plan having "full authority to implement removal actions" on behalf of the plan holder. The qualified individual must have the authority to commit the financial resources of the company to prevent or clean up a spill.

One of the primary responsibilities of the qualified individual is, upon learning of a spill or potential spill of an oil or hazardous substance, to immediately communicate with the appropriate federal official and the persons providing personnel and equipment for the spill response. This procedure will ensure timely notification of federal officials so that they may activate Area Contingency Plans notify other federal, state, and local agencies ensure adequate measures are taken by the responsible party and activate governmental response resources when necessary. It also ensures that response resources identified by the plan holder will commence appropriate response actions in a timely manner.

Federal regulations require response plan holders to identify the type of training the qualified individual will receive. The goal is to ensure that the qualified individual is fully capable to perform his or her duties. Although the qualified individual is not expected to be a technical expert in vessel salvage, clean–up technology, or pipeline repair, the qualified individual must be familiar enough with the company's response plan to know what measures must be taken under the circumstances. The qualified individual must ensure adequate steps are taken to mitigate the situation and should know the capabilities of any oil spill removal organization (OSRO) which is contracted to respond on behalf of the company. The qualified individual should be thoroughly familiar with procedures to activate and contract with the company's OSRO.

The following TAB provides suggested elements which could be incorporated into the training program for a qualified individual. The material should not be considered as mandatory training nor should it be considered all–inclusive. A training program which provided all of the suggested training elements would certainly be very comprehensive. An individual receiving this training would have an excellent educational foundation to help him or her play a highly pro active role in the plan holder's response organization. Plan holders must decide the actual role of the qualified individual in their organizations and customize their training programs accordingly.

## TAB A

**Suggested training elements for qualified individuals:**

*Demonstrate knowledge of the following:*

♦ Captain of the Port (COTP) Zones or Environmental Protection Agency (EPA) Regions in which the vessel will operate or facility is located.

♦ Notification procedures and requirements for vessel or facility owners or operators; internal response organizations; federal and state agencies; and contracted oil spill removal organizations (OSROs) and the information required for those organizations.

♦ Communication system used for the notifications.

♦ Information on the cargoes carried by the vessel or transferred, stored, or used by the facility, including familiarity with the material safety data sheets, special handling procedures, health and safety hazards, spill and fire fighting procedures.

♦ Procedures the crew or facility personnel may use to mitigate or prevent any discharge or a substantial threat of a discharge of oil resulting from shipboard or facility operational activities associated with internal or external cargo transfers, storage, or use.

♦ Procedures the vessel's crew may use to mitigate or prevent any discharge or a substantial threat of a discharge of oil in the event of --

- Grounding or stranding;
- Collision;
- Explosion or fire;
- Hull failure;
- Excessive list; or
- Equipment failure.

♦ Procedures for both the internal and ship-to-ship transfers of cargo in an emergency.

♦ Procedures and arrangements for emergency towing, including the rigging and operation of any emergency towing equipment aboard the vessel.

♦ Vessel crew or facility personnel responsibilities, and procedures for use of shipboard or facility equipment which may be carried to mitigate an oil discharge.

♦ The vessel crew's responsibilities, if any, to initiate a response and supervise shore-based response resources.

♦ Operational capabilities of the contracted OSROs to respond to the following:

- Average most probable discharge (small discharge);
- Maximum most probable discharge (medium discharge); and
- Worst case discharge.

- Public information;
- Safety;
- Liaison with government agencies;
- Spill response operations;
- Planning;
- Logistics support; and
- Finance.

- The drill and exercise program to meet the federal requirements.
- The Area Contingency Plan for the area in which the facility is located.
- The National Contingency Plan.
- Roles and responsibilities of federal and state agencies in pollution response.
- OSHA requirements for worker health and safety (29 CFR 1910.120).■